SEQUENCE LISTING

<110> Wang, Tongtong
 Marnerakis, Margarita
 Fanger, Gary R.
 Vedvick, Thomas S.
 Carter, Darrick
 Watanabe, Yoshihiro
 Henderson, Robert A.
 Peckham, David W.
 Fanger, Neil

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
AND DIAGNOSIS OF LUNG CANCER

<130> 210121.455C16

<140> US

<141> 2001-06-28

<160> 467

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<221> misc feature

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Next and consecuency consecuency consecuency of the consecuency co
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cataactttt aacaacactg ctctqtaatg qqttqaactg tqqtactcag actgagataa 180
ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
ttattggaaa ttttgtcctc tgtaactggc actttggggt gtgacttatc ttttgccttt 360
gtaaaaaaaa aaaaaaaaaa
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340, 342, 343
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catcctcacc atacaccatc cactttccaa taacatttaa teetttetaa aattgtaagt 120
atacaattgt actttctttg gattttcata acaaatatac catagactgt taattttatt 180
qaaqtttcct taatqqaatq agtcattttt gtcttgtgct tttgaggtta cctttgcttt 240
gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300
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tetettetee aagttgtget ttgtggggae aatcattett tgaacattag agaggaagge 180
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tgtggacagt gcacgtgcct tacgctacat cttgttttct aggaagaagg ggatgcnggg 300
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536, 549, 553, 556, 557, 559, 568, 593, 597, 605, 611, 613,
616, 618, 620, 628, 630, 632, 634, 635, 639, 643, 647, 648,
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649, 652, 654, 658, 664, 690
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gcataaagcc aatgtagtcc agtttctaag atcatgttcc aagctaactg aatcccactt 180
caatacacac tcatgaactc ctgatggaac aataacaggc ccaagcctgt ggtatgatgt 240
qcacacttqc taqactcaqa aaaaatacta ctctcataaa tgggtgggag tattttgggt 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatnttcat ttattccatg 360
gacatttagt tagtgetttt tatataccag geatgatget gagtgacaet ettgtgtata 420
tntccaaatn ttngtncngt cgctgcacat atctgaaatc ctatattaag antttcccaa 480
natgangtee etggttttte caegecaett gatengteaa ngateteaee tetgtntgte 540
ctaaaaccnt ctnctnnang gttagacngg acctetette teeetteeeg aanaatnaag 600
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717, 723, 724, 725, 733
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catgittatc tittattatg intigigaag tigigicitt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaaga gaatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa 240
gttcttgtta tttccaaata gaatggactt ggtctgttaa ggggctaagg gagaagaaga 300
agataaggtt aaaagttgtt aatgaccaaa cattctaaaa gaaatgcaaa aaaaaattta 360
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tgagantttc tcantaatat cctgaatcat tcatttcagc tnaggcttca tgttgactcg 480
atatgtcatc tagggaaagt ctatttcatg gtccaaacct gttgccatag ttggtnaggc 540
tttcctttaa ntgtgaanta ttnacangaa attttctctt tnanagttct tnatagggtt 600
aggggtgtgg gaaaagcttc taacaatctg tagtgttncg tgttatctgt ncagaaccan 660
aatnacggat cgnangaagg actgggtcta tttacangaa cgaatnatct ngttnnntgt 720
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gtnnncaact ccngggagcc
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<212> DNA
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639, 653, 659, 661
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ettgggatge aggagetgtt ceggggecae ageaagaeeg egagtteetg gegeaeageg 180
ccaaggtgca ctcggtggcc tggagttgcg acgggcgtcg cctacctcgg ggtcttcgac 240
aagacgccac gtcttcttgc tgganaanga ccgttggtca aagaaaacaa ttatcgggga 300
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cgtctggaga taaaaccatt cgcatctggg atgtgaggac tacaaaatgc attgccactg 420
tgaacactaa aggggagaac attaatatct gctggantcc tgatgggcan accattgctg 480
tagenacaag gatgatgtgg tgactttatt gatgecaaga aacceegtte caaageaaaa 540
aaacanttcc aanttcgaag tcaccnaaat ctcctggaac aatgaacatn aatatnttct 600
teetgacaat ggneettggg tgtnteacat ceteagetne eccaaaactg aaneetgtne 660
natccacccc
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610, 620, 621, 622, 628, 641, 646, 656, 673
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cacctagcat tgcctactta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
tagagcaaag ganagacagc ccccattacc aaataccatt tttgcctggg gcttgtgcag 300
ctggcagtgt tcctgcccca gcatggcacc ttatngtttt gatagcaact tcgttgaatt 360
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gatatatntt cctagtggtt tgactttnaa aataaatnag gtttantttt ctccccccnn 480
ennthetnee intenetenn ennteeecce enetengtee teennnnttn gggggggeen 540
cccccneggn ggacccccct ttggtccctt agtggaggtt natggcccct ggnnttatcc 600
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aagectaagt ttntaccctg ggggtcccc
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<213> Homo sapiens
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<221> misc feature
<222> 602, 632, 639, 668
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taaaaaatgc ttqttctata qtqqaqtaaq aqctcacaca cccaaggcag caagataact 120
gaaaaaagcg aggctttttt gccaccttgg taaaggccag ttcactgcta tagaactgct 180
ataagcctga agggaagtag ctatgagact ttccattttt cttagttctc ccaataggct 240
ccttcatqqa aaaaqqcttc ctqtaataat tttcacctaa tqaattaqca qtqtqattat 300
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caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
catctgaata atattgtgga tttccccctc tgcttgcatc ttcttttgac tcctctggga 600
anaaatqtca aaaaaaaqq tcgatctact cngcaaggnc catctaatca ctgcgctgga 660
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<212> DNA
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ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
tttttctttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtcccac 240
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aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa
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<212> DNA
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ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
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<211> 679

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587, 588, 589, 590, 592, 593, 598, 599, 603, 605, 608
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674, 675, 682, 683
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qcatqcattt qtaacatqat taqtaqattt qaatatataq atqtaqtatn ttgggtatct 180
aggtgtttta tcattatgta aaggaattaa agtaaaggac tttgtagttg tttttattaa 240
atatgcatat agtagagtgc aaaaatatag caaaaatana aactaaaggt agaaaagcat 300
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agaccagtgc etgggtggtg ceteceettg tetgeeecce tgaagaactt eecteaegtg 420
angtagtgcc ctcgtaggtg tcacgtggan tantggganc aggccgnncn gtnanaagaa 480
ancanngtga nagtttenee gtngangeng aactgteect gngeennnae geteecanaa 540
enthteeaat ngacaatega gttteennne teengnaace tngeegnnnn enngeeenne 600
cantntqnta accceqeqee eggategete tennntegtt etenenenaa ngggnttten 660
                                                                   685
enneegecqt enenneegeg ennee
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<211> 694
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<213> Homo sapiens
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679, 687
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agttgacgaa gatctggttt acaagaacta attaaatgtt tcattgcatt tttgtaagaa 120
cagaataatt ttataaaatg tttgtagttt ataattgccg aaaataattt aaagacactt 180
tttctctqtq tqtqcaaatq tqtqtttqtq atccattttt ttttttttt taggacacct 240
gtttactagc tagctttaca atatgccaaa aaaggatttc teeetgaccc cateegtggt 300
teaccetett tteececeat getttttgee etagtttata acaaaggaat gatgatgatt 360
taaaaagtag ttetgtatet teagtatett ggtetteeag aaceetetgg ttgggaaggg 420
gatcattttt tactqqtcat ttccctttqq aqtqtactac tttaacaqat qqaaaqaact 480
cattggccat ggaaacagcc gangtgttgg gagccagcag tgcatggcac cgtccggcat 540
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ctgactgcac ngccaatggt tttcatgaag aatacngcat ncncngtgat cacgtnancc 660
angacqctat gggggncana gggccanttg cttc
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<210> 14
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226, 229, 239, 241, 245, 252, 255, 259, 303, 309, 359, 387,
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592, 609, 610, 618, 620, 626, 627, 633, 639, 645, 654
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ccaagtgcat caaatacctg engtneggat ntaaattcat ettetggett geeggattg 180
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242, 261, 266, 270, 278, 285, 286, 298, 311, 324, 337, 350,
363, 384, 391, 395, 405, 411, 424, 427, 443, 448, 453, 455,
458, 463, 467, 470, 479, 482, 484, 493, 499, 505, 518
<223> n = A, T, C or G
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<222> 520, 523, 531, 540, 584, 595, 597, 609, 611, 626, 628, 651,
652, 657, 661, 665, 669, 672, 681, 683, 691, 693
<223> n = A, T, C or G
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tggcaaatna gcattctgtc tcnttggctg engcctcanc ncaaaaaanc ngaactcnat 240
enggeecagg aatacatete neaatnaacn aaattganea aggenntggg aaatgeenga 300
tgggattatc ntccgcttgt tgancttcta agtttcnttc ccttcattcn accctgccag 360
conagtictg tragaaaaat goongaatto naacnooggt titontacto ngaattraga 420
tctncanaaa cttcctggcc acnattcnaa ttnanggnca cgnacanatn ccttccatna 480
aneneaccc aentttgana gecangacaa tgaetgentn aantgaagge ntqaaggaan 540
aactttgaaa ggaaaaaaa ctttgtttcc ggccccttcc aacncttctg tgttnancac 600
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    <221> misc feature
    <222> 299, 354, 483, 555, 571, 573, 577, 642, 651, 662, 667
    <223> n = A, T, C or G
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     ttocogggcc cottacacto cacagtocog gtocogocat gtocoagaaa caagaagaag 120
    agaaccetge ggaggagace ggegaggaga ageaggacae geaggagaaa gaaggtatte 180
# # # P
    tgcctgagag agctgaagag gcaaagctaa aggccaaata cccaagccta ggacaaaagc 240
    ctggaggctc cgacttcctc atgaagagac tccagaaagg gcaaaagtac tttgactcng 300
qaqactacaa catqqccaaa qccaacatga agaataagca gctgccaagt gcangaccag 360
ı,
    acaagaacct ggtgactggt gatcacatcc ccaccccaca ggatctgccc agagaaagtc 420
1.0
    ctcgctcgtc accagcaagc ttgcgggtgg ccaagttgaa tgatgctgcc ggggctctgc 480
14
     canatotgag acgetteect ecetgeecea ecegggteet gtgetggete etgeeettee 540
1. J. S.
     tgcttttgca gccangggtc aggaagtggc nenggtngtg gctggaaagc aaaacccttt 600
117
     cctgttggtg teceaeceat ggageecetg gggegageec angaaettga neetttttgt 660
     tntcttncc
3
1 2 2
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113
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<213> Homo sapiens
100
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     141, 143, 150, 156, 166, 167, 170, 172, 180, 181, 190, 192,
     194, 199, 201, 209, 212, 224, 225, 226, 230, 233, 234, 236,
     242, 244, 251, 253, 256, 268, 297, 305, 308, 311, 314
     <223> n = A, T, C or G
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     473, 476, 479, 489, 491, 494, 499, 505, 507, 508, 522, 523,
     527, 530, 533, 535, 538, 539, 545, 548, 550, 552, 555
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     628, 632, 638, 642, 644, 653, 658, 662, 663, 665, 669, 675,
     680, 686, 689
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geetgeecan ggganeeca neneteggan eccatnteae accegnneen thegeecaen 180
nectggeten enengeeeng necagetene gneceeetee geennneten tinnentete 240
chencectee nenaenaect ectaecency geteceteec cageeceece ecgeaaneet 300
ccacnacnee ntennenega aneneenete genetengee cengeceeet geeeeegee 360
chenachneg eghteeceeg egenegenge eteneceet eccaenaeag neneaecege 420
agneaegene teegeeenet gaegeeeenn eeegeegege teacetteat ggneenaeng 480
ccccqctcnc nccnctgcnc gccgncnngg cgccccgccc cnnccgngtn ccncncgnng 540
ccccngcngn angengtgeg enneangnee gngeegnnen neacceteeg neeneegeee 600
egecegetgg gggetecege enegeggnte anteceence entnegecea ethtecgnte 660
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cnnenetene getengegen egeceneene ecceece
<210> 18
<211> 670
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 234, 292, 329, 437, 458, 478, 487, 524, 542, 549, 550, 557,
576, 597, 603, 604, 646, 665
<223> n = A, T, C or G
<400> 18
ctcgtgtgaa gggtgcagta cctaagccgg agcggggtag aggcgggccg gcaccccctt 60
ctgacctcca gtgccgccgg cctcaagatc agacatggcc cagaacttga acgacttggc 120
gggacggctg cccgcgggc cccggggcat gggcacggcc ctgaagctgt tgctgggggc 180
cggcgccgtg gcctacggtg tgcgcgaatc tgtgttcacc gtggaaggcg ggcncagagc 240
catcttcttc aatcggatcg gtggagtgca caggacacta tcctgggccg anggccttca 300
cttcaggatc cttggttcca gtaccccanc atctatgaca ttcgggccag acctcgaaaa 360
aatctcctcc ctacaggctc caaagaccta cagatggtga atatctccct gcgagtgttg 420
tctcgaccaa tgctcangaa cttcctaaca tgttccancg cctaagggct ggactacnaa 480
gaacgantgt tgccgtccat tgtcacgaag tgctcaagaa tttnggtggc caagttcaat 540
gncctcacnn ctgatcnccc agcggggcca agttanccct ggttgatccc cgggganctg 600
acnnaaaagg gccaaggact teceetcate etggataatg tggeenteae aaageteaae 660
                                                                   670
tttanccacc
<210> 19
 <211> 606
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> 506
 <223> n = A, T, C or G
 <400> 19
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 tgtcgccttg gctcaactgt ggttgatttg tctgtgcccg gaaagtttgg catcattcgt 180
 ccaggetgtg ccctggaaag tactacagee atectecaae agaagtaegg actgeteece 240
 tcacatgcgt cctacctgtg aaactctggg aagcaggaag gcccaagacc tggtgctgga 300
```

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tactatgtgt ctgtccactg acgactgtca aggcctcatt tgcagaggcc accggagcta 360
gggcactage etgaetttta aggeagtgtg tetttetgag caetgtagae caageeettg 420
gagctgctgg tttagccttg cacctgggga aaggatgtat ttatttgtat tttcatatat 480
cagccaaaag ctgaatggaa aagttnagaa cattcctagg tggccttatt ctaataagtt 540
tcttctgtct gttttgtttt tcaattgaaa agttattaaa taacagattt agaatctagt 600
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gagacc
<210> 20
<211> 449
<212> DNA
<213> Homo sapiens
<400> 20
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cagcgccaga gccgaggaga acccccgctc cctgaggagg acctgtccaa actcttcaaa 120
ccaccacage egectgeeag gatggaeteg etgeteattg eaggeeagat aaacaettae 180
tgccagaaca tcaaggagtt cactgcccaa aacttaggca agctcttcat ggcccaggct 240
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tgaagtcaca ccagggcaac tcttggaaga aatatatttg catattgaaa agcacagagg 360
atttctttag tgtcattgcc gattttggct ataacagtgt ctttctagcc ataataaaat 420
aaaacaaaat cttgactgct tgctcaaaa
<210> 21
<211> 409
<212> DNA
<213> Homo sapiens
<400> 21
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tatgttgagt gaaagaacaa acacggagaa catactatgt ggttctcttt atgtaacatt 180
acagaaataa aaacagaggc aaccaccttt gaggcagtat ggagtgagat agactggaaa 240
aaggaaggaa ggaaactcta cgctgatgga aatgtctgtg tcttcattgg gtggtagtta 300
tgtggggata tacatttgtc aaaatttatt gaactatata ctaaagaact ctgcatttta 360
ttgggatgta aataatacct caattaaaaa gacaaaaaaa aaaaaaaaa
                                                                 409
<210> 22
<211> 649
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 263, 353, 610, 635, 646
<223> n = A, T, C or G
<400> 22
acaattttca ttatcttaag cacattgtac atttctacag aacctgtgat tattctcgca 60
tgataaggat ggtacttgca tatggtgaat tactactgtt gacagtttcc gcagaaatcc 120
tatttcagtg gaccaacatt gtggcatggc agcaaatgcc aacattttgt ggaatagcag 180
caaatctaca agagaccctg gttggttttt cgttttgttt tctttgtttt ttcccccttc 240
tectgaatea geagggatgg aangagggta gggaagttat gaattactee ttecagtagt 300
agctctgaag tgtcacattt aatatcagtt ttttttaaac atgattctag ttnaatgtag 360
aagagagaag aaagaggaag tgttcacttt tttaatacac tgatttagaa atttgatgtc 420
```

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ttatatcagt agttctgagg tattgatagc ttgctttatt tctgccttta cgttgacagt 480
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gatgttttct ttggaatttc cggataagtt caggaaaaca tctgcatgtt gttatctagt 600
ctgaagttcn tatccatctc attacaacaa aaacncccag aacggnttg
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<210> 23
<211> 669
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 642, 661
<223> n = A, T, C or G
<400> 23
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tactctcagt caccagetet ggaattagat aaatteettg aagatgtcag gaatgggate 120
tatectetga cageetttgg getgeetegg eeccageage caeageagga ggaggtgaca 180
teacetgteg tgeececete tgteaagaet eegacaeetg aaceagetga ggtggagaet 240
cgcaaggtgg tgctgatgca gtgcaacatt gagtcggtgg aggagggagt caaacaccac 300
ctgacacttc tgctgaagtt ggaggacaaa ctgaaccggc acctgagetg tgacctgatg 360
ccaaatgaga atateeecga gttggegget gagetggtge agetgggett cattagtgag 420
gctgaccaga gccggttgac ttctctgcta gaagagactt gaacaagttc aattttgcca 480
ggaacagtac cctcaactca gccgctgtca ccgtctcctc ttagagctca ctcgggccag 540
gccctgatct gcgctgtggc tgtcctggac gtgctgcacc ctctgtcctt ccccccagtc 600
agtattacct gtgaagccct tccctccttt attattcagg anggctgggg gggctccttg 660
                                                                   669
nttctaacc
<210> 24
<211> 442
<212> DNA
<213> Homo sapiens
<400> 24
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tcactgccat cattaagcat cagtttcaaa attatagcca ttcatgattt actttttcca 120
gatgactate attattetag teetttgaat ttgtaagggg aaaaaaaaca aaaacaaaaa 180
cttacqatqc acttttctcc aqcacatcaq atttcaaatt gaaaattaaa gacatgctat 240
qqtaatgcac ttgctagtac tacacacttt ggtacaacaa aaaacagagg caagaaacaa 300
cggaaagaga aaagcettee tttgttggee ettaaaetga gteaagatet gaaatgtaga 360
gatgatetet gacgatacet gtatgttett attgtgtaaa taaaattget ggtatgaaat 420
                                                                   442
gacctaaaaa aaaaaaaaga aa
<210> 25
<211> 656
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 330, 342, 418, 548, 579, 608
<223> n = A, T, C or G
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<400> 25
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ecceggaatg tacagtgtet tggtgeacea agatgeette taaaggetga eatacettgg 120
accetaatgg ggeagagat atageeetag eecagtggtg acatgaceae teeetttggg 180
aggectgagg tagaggggag tggtatgtgt tttctcagtg gaagcagcac atgagtgggt 240
gacaggatgt tagataaagg ctctagttag ggtgtcattg tcatttgaga gactgacaca 300
ctcctagcag ctggtaaagg ggtgctggan gccatggagg anctctagaa acattagcat 360
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atgggacagt tttccatatc cttgctgtgg agctctggaa cactctctaa atttccctct 480
attaaaaatc actgccctaa ctacacttcc tccttgaagg aatagaaatg gaactttctc 540
tgacatantt cttggcatgg ggagccagcc acaaatgana atctgaacgt qtccaggttt 600
ctcctganac tcatctacat agaattggtt aaaccctccc ttggaataag gaaaaa
<210> 26
<211> 434
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 395
<223> n = A, T, C or G
<400> 26
actagttcag actgccacgc caaccccaga aaatacccca catgccagaa aagtgaagtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggcctcgcga taaaaacaaa 120
acaaaaaaac gctgccaggt tttagaagca gttctggtct caaaaccatc aggatcctgc 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
aataactgaa ttgtcaggct ttgattgata attgtagaaa taagtagcct tctgttgtgg 300
gaataagtta taatcagtat tcatctcttt gttttttgtc actcttttct ctctaattgt 360
qtcatttgta ctgtttgaaa aatatttctt ctatnaaatt aaactaacct gccttaaaaa 420
aaaaaaaaa aaaa
                                                                   434
<210> 27
<211> 654
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 505, 533, 563, 592, 613, 635, 638
<223> n = A, T, C or G
<400> 27
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taataaacca ggatccattt aggtaccact tgatataaaa aggatatcca taatgaatat 120
tttatactgc atcetttaca ttagecacta aatacgttat tgettgatga agacetttea 180
cagaateeta tggattgeag cattteactt ggetaettea tacceatgee ttaaagaggg 240
gcagtttctc aaaagcagaa acatgccgcc agttctcaag ttttcctcct aactccattt 300
quatgtaagg gcagctggcc cccaatgtgg ggaggtccga acattttctg aattcccatt 360
ttcttqttcg cggctaaatg acagtttctg tcattactta gattccgatc tttcccaaag 420
gtgttgattt acaaagaggc cagctaatag cagaaatcat gaccctgaaa gagagatgaa 480
atteaagetg tgageeagge agganeteag tatggeaaag gtettgagaa tengeeattt 540
ggtacaaaaa aaattttaaa gcntttatgt tataccatgg aaccatagaa anggcaaggg 600
```

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654
aattgttaag aanaatttta agtgtccaga cccanaanga aaaaaaaaaa aaaa
<210> 28
<211> 670
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 101, 226, 274, 330, 385, 392, 397, 402, 452, 473, 476, 532,
534, 538, 550, 583, 595, 604, 613, 622, 643, 669
<223> n = A, T, C or G
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gttcccggtg ctcctggtgt ctctctcggc agctttagcg acctgncttt ccttctgagc 240
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tatagggaat gtgggaaatc ctganctctt tnttatntcg tntgatttct tgtgttttat 420
ttgccaaaat gttaccaatc agtgaccaac cnagcacagc caaaaatcgg acntcngctt 480
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tattactaan ttttttctgt tgggcaaaag aatctcagga acngccctgg ggccnccgta 600
ctanagttaa ccnagctagt tncatgaaaa atgatgggct ccncctcaat gggaaagcca 660
                                                                    670
agaaaaagnc
<210> 29
<211> 551
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 336, 474, 504, 511, 522, 523, 524, 540, 547
<223> n = A, T, C \text{ or } G
<400> 29
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agateteage gtttageeae ettaceeatg eetgatgatt etgtagaaaa ggtttettet 120
ccctctccag ccactgatgg gaaagtattc tccatcagtt ctcaaaaatca gcaagaatct 180
teagtaceag aggtgeetga tgttgeaeat ttgeeaettg agaagetggg accetgtete 240
cctcttgact taagtcgtgg ttcagaagtt acagcaccgg tagcctcaga ttcctcttac 300
cqtaatqaat gtcccagggc agaaaaagag gatacncaga tgcttccaaa tccttcttcc 360
aaagcaatag ctgatgggaa gaggagctcc agcagcagca ggaatatcga aaacagaaaa 420
aaaaqtqaaa ttqqqaaqac aaaagctcaa cagcatttgg taaggagaaa aganaagatg 480
aqqaaqqaaq aqaqaaqaqa gacnaagatc nctacggacc gnnncggaag aagaagaagn 540
                                                                    551
aaaaaanaaa a
<210> 30
<211> 684
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> 545, 570, 606, 657, 684
<223> n = A, T, C or G
<400> 30
actagttcta tctggaaaaa gcccgggttg gaagaagctg tggagagtgc gtgtgcaatg 60
cqaqactcat ttcttggaag catccctggc aaaaatgcag ctgagtacaa ggttatcact 120
gtgatagaac ctggactgct ttttgagata atagagatgc tgcagtctga agagacttcc 180
agcacctctc agttgaatga attaatgatg gcttctgagt caactttact ggctcaggaa 240
ccacqaqaqa tgactgcaga tgtaatcgag cttaaaggga aattcctcat caacttagaa 300
ggtggtgata ttcgtgaaga gtcttcctat aaagtaattg tcatgccgac tacgaaagaa 360
aaatgccccc gttgttggaa gtatacagcg ggagtcttca gatacactgt gtcctcgatg 420
tgcagaagtt gtcagtggga aaatagtatt aacagctcac tcgagcaaga accctcctga 480
cagtactggg ctagaagttt ggatggatta tttacaatat aggaaagaaa gccaagaatt 540
aqqtnatqaq tqqatqaqta aatqqtggan gatggggaat tcaaatcaga attatggaag 600
aagttnttcc tgttactata gaaaggaatt atgtttattt acatgcagaa aatatanatg 660
                                                                   684
tgtggtgtgt accgtggatg gaan
<210> 31
<211> 654
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 326, 582, 651
<223> n = A, T, C \text{ or } G
<400> 31
gcgcagaaaa ggaaccaata tttcagaaac aagcttaata ggaacagctg cctgtacatc 60
aacatettet cagaatgace cagaagttat categtggga getggegtge ttggetetge 120
tttggcagct gtgctttcca gagatggaag aaaggtgaca gtcattgaga gagacttaaa 180
agagcctgac agaatagttg gagaattcct gcagccgggt ggttatcatg ttctcaaaga 240
ccttggtctt ggagatacag tggaaggtct tgatgcccag gttgtaaatg gttacatgat 300
tcatgatcag ggaaagcaaa tcagangttc agattcctta ccctctgtca gaaaacaatc 360
aagtgcagag tggaagaget ttecateaeg gaagatteat catgagtete eggaaageag 420
ctatqqcaqa qcccaatqca aagtttattq aaggtqttqt gttacagtta ttagaggaag 480
atgatgttgt gatgggagtt cagtacaagg ataaagagac tgggagatat caaggaactc 540
catgctccac tgactgttgt tgcagatggg cttttctcca anttcaggaa aagcctggtc 600
tcaataaagt ttctgtatca ctcatttggt tggcttctta tgaagaatgc nccc
<210> 32
<211> 673
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 376, 545, 627
<223> n = A, T, C or G
<400> 32
actagtgaag aaaaagaaat tetgataegg gacaaaaatg etetteaaaa cateattett 60
```

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the training control of the control
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tatcacctga caccaggagt tttcattgga aaaggatttg aacctggtgt tactaacatt 120
ttaaagacca cacaaggaag caaaatcttt ctgaaagaag taaatgatac acttctggtg 180
aatgaattga aatcaaaaga atctgacatc atgacaacaa atggtgtaat tcatgttgta 240
gataaactcc tctatccagc agacacacct gttggaaatg atcaactgct ggaaatactt 300
aataaattaa tcaaatacat ccaaattaag tttgttcgtg gtagcacctt caaagaaatc 360
cccgtgactg tctatnagcc aattattaaa aaatacacca aaatcattga tgggagtgcc 420
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cagggattag aaa
<210> 33
<211> 673
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 325, 419, 452, 532, 538, 542, 571, 600, 616, 651, 653, 672
<223> n = A, T, C or G
<400> 33
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ggatctgttg tttcttttgg gtctcacctc atcagtgtgc atagtggcag aaattataaa 120
qaaqqttqaa aqqaqcaqqq aaaaqatcca gaaqcatgtt agttcgacat catcatcttt 180
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gaaactttat aaagcatatg gtcagttatt tnattaaaaa ggcaaaacct gaaccacctt 480
ctgcacttaa agaagtctaa cagtacaaat acctatctat cttagatgga tntattntt 540
tntattttta aatattgtac tatttatggt nggtggggct ttcttactaa tacacaaatn 600
aatttatcat ttcaanggca ttctatttgg gtttagaagt tgattccaag nantgcatat 660
ttcqctactq tnt
<210> 34
<211> 684
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 414, 472, 480, 490, 503, 507, 508, 513, 523, 574, 575, 598,
659, 662, 675
<223> n = A, T, C or G
<400> 34
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tgatcagggc tggtgtagca tccggttcct ttagtgcagc taactgcatt tgtcactgat 120
gaccaaggag gaaatcacta agacatttga gaagcagtgg tatgaacgtt cttggacaag 180
ccacagttet gageettaac eetgtagttt geacacaaga acgageteea eeteeeette 240
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qqqcactqtt atqqctqqqt atqqaqcqqa caqccccaqq aatcagagcc tcagcccggc 360
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tgcctqqttq qaaqqtacaq qtqttcaqca ccttcqqaaa aaqqqcataa agtngtgggg 420
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gaattggatn catttttgac cangatnntt ctnctatgct ttnttgcaat gaaatcaaat 540
cccqcattat ctacaaqtqq tatqaaqtcc tqcnnccccc agagagqctg ttcaggcnat 600
gtcttccaag ggcagggtgg gttacaccat tttacctccc ctctcccccc agattatgna 660
cncagaagga atttntttcc tccc
                                                                 684
<210> 35
<211> 614
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 17, \overline{2}0, 152, 223, 267, 287, 304, 306, 316, 319, 321, 355,
365, 382, 391, 407, 419, 428, 434, 464, 467, 477, 480, 495,
499, 505, 515, 516, 522, 524, 527, 542, 547, 549, 567, 572,
576, 578
<223> n = A, T, C or G
<400> 35
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teactgeatg aagactgget tgteteagtg tnteaacete accagggetg tetettggte 180
caeacctcqc tecetqttag tgccqtatga cageccccat canatgaect tggccaagte 240
acqqtttctc tqtqqtcaat gttqqtngqc tqattqqtqq aaaqtangqt ggaccaaagg 300
aagnenegtg ageagneane necagttetg caccageage geeteegtee tactngggtg 360
ttccnqtttc tcctqqccct qnqtqqqcta ngqcctgatt cgggaanatg cctttgcang 420
qaaqqqanqa taantqqqat ctaccaattq attctqqcaa aacnatntct aagattnttn 480
tgctttatgt ggganacana tctanctctc atttnntqct gnanatnaca ccctactcgt 540
qntcqancnc qtcttcqatt ttcqqanaca cnccantnaa tactqqcqtt ctqttqttaa 600
                                                                  614
aaaaaaaaaa aaaa
<210> 36
<211> 686
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 222, 224, 237, 264, 285, 548, 551, 628, 643, 645, 665, 674
<223> n = A, T, C or G
<400> 36
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ctcagctcgc cagtccggtc gctngcttcc cgccgcatgg caatnagaca gacgccgctc 300
acctgctctg ggcacacgcg acccgtggtt gatttggcct tcagtggcat caccettatg 360
ggtatttctt aatcagcgct tgcaaagatg gttaacctat gctacgccag ggagatacag 420
qaqactqqat tqqaacattt ttqqqqtcta aaqqtctqtt tqqqqtqcaa cactqaataa 480
ggatgccacc aaagcagcta cagcagctgc agatttcaca gcccaagtgt gggatgctgt 540
ctcaqqanat naattqataa cctqqctcat aacacattqt caaqaatqtq gatttcccca 600
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qqatattatt atttqtttac cqqqqqanaq gataactqtt tcncntattt taattgaaca 660
aactnaaaca aaanctaagg aaatcc
<210> 37
<211> 681
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 7, 1\overline{0}, 11, 19, 25, 32, 46, 53, 77, 93, 101, 103, 109, 115,
123, 128, 139, 157, 175, 180, 192, 193, 194, 212, 218, 226,
227, 233, 240, 241, 259, 260, 267, 289, 296, 297, 298, 312,
313, 314, 320, 325, 330, 337, 345, 346, 352, 353, 356
<223> n = A, T, C or G
<221> misc feature
<222> 382, 385, 400, 427, 481, 484, 485, 491, 505, 515, 533, 542,
544, 554, 557, 560, 561, 564, 575, 583, 589, 595, 607, 619,
628, 634, 641, 645, 658, 670
<223> n = A, T, C or G
<400> 37
gagacanach naacgtcang agaanaaaag angcatggaa cacaanccag genegatgge 60
caccttecca ecageaneca gegeeecca gengeeecca ngneeggang accangacte 120
cancetgnat caatetgane tetatteetg geceatneet aceteggagg tggangeegn 180
aaaqqtcqca cnnncaqaqa aqctqctqcc ancaccancc gccccnnccc tqncgggctn 240
nataggaaac tggtgaccnn gctgcanaat tcatacagga gcacgcgang ggcacnnnct 300
cacactgagt tnnngatgan gcctnaccan ggacctnccc cagcnnattg annacnggac 360
tgcggaggaa ggaagacccc gnacnggatc ctggccggcn tgccaccccc ccacccctag 420
qattatnece ettqaetqag tetetqaqqq qetaeceqaa eeegeeteea tteeetaeca 480
natnntgctc natcgggact gacangctgg ggatnggagg ggctatcccc cancatcccc 540
tnanaccaac agenaengan natngggget eeeengggte ggngeaacne teetneacce 600
eggegengge etteggtgnt gteeteente aacnaattee naaanggegg geeeecengt 660
ggactcctcn ttgttccctc c
<210> 38
<211> 687
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 3, 30, 132, 151, 203, 226, 228, 233, 252, 264, 279, 306,
308, 320, 340, 347, 380, 407, 429, 437, 440, 445, 448, 491,
559, 567, 586, 589, 593, 596, 603, 605, 606, 609, 626, 639,
655, 674, 682
<223> n = A, T, C or G
<400> 38
canaaaaaaa aaaacatggc cgaaaccagn aagctgcgcg atggcgccac ggcccctctt 60
ctcccqqcct qtqtccqqaa qqtttccctc cqaqqcqccc cqqctcccqc aagcqgagga 120
gaggggggga entgeegggg eeggagetea naggeeetgg ggeegetetg eteteeegee 180
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ategeaaggg eggegetaac etnaggeete eeegeaaagg teeeenange ggnggeggeg 240

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gggggctgtg anaaccgcaa aaanaacgct gggcgcgcng cgaacccgtc cacccccgcg 300
aaggananac ttccacagan gcagcgtttc cacagcccan agccacnttt ctagggtgat 360
qcaccccaqt aagttcctgn cqqqqaagct caccqctqtc aaaaaanctc ttcqctccac 420
cggcgcacna aggggangan ggcangange tgccgcccgc acaggtcatc tgatcacgtc 480
geoegeceta ntetgetttt gtgaatetee actttgttea acceeaceeg eegttetete 540
ctccttgcgc cttcctctna ccttaanaac cagcttcctc tacccnatng tanttnctct 600
genenngtng aaattaatte ggteeneegg aacetettne etgtggeaac tgetnaaaga 660
                                                                   687
aactgctgtt ctgnttactg cngtccc
<210> 39
<211> 695
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 300, 401, 423, 429, 431, 437, 443, 448, 454, 466, 492, 515,
523, 524, 536, 538, 541, 552, 561, 566, 581, 583, 619, 635,
636, 641, 649, 661, 694
<223> n = A, T, C or G
<400> 39
actagtctgg cctacaatag tgtgattcat gtaggacttc tttcatcaat tcaaaacccc 60
tagaaaaacg tatacagatt atataagtag ggataagatt tctaacattt ctgggctctc 120
tgacccctgc gctagactgt ggaaagggag tattattata gtatacaaca ctgctgttgc 180
cttattagtt ataacatgat aggtgctgaa ttgtgattca caatttaaaa acactgtaat 240
ccaaactttt ttttttaact gtagatcatg catgtgaatg ttaatgttaa tttgttcaan 300
gttgttatgg gtagaaaaaa ccacatgcct taaaatttta aaaagcaggg cccaaactta 360
ttagtttaaa attaggggta tgtttccagt ttgttattaa ntggttatag ctctgtttag 420
aanaaatcna ngaacangat ttngaaantt aagntgacat tatttnccag tgacttgtta 480
atttgaaatc anacacggca cetteegttt tggtnetatt ggnntttgaa tecaanengg 540
ntccaaatct tnttggaaac ngtccnttta acttttttac nanatcttat ttttttattt 600
tggaatggcc ctatttaang ttaaaagggg ggggnnccac naccattent gaataaaact 660
naatatatat ccttggtccc ccaaaattta aggng
                                                                   695
<210> 40
<211> 674
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 403, 428, 432, 507, 530, 543, 580, 583, 591, 604, 608, 621,
624, 626, 639, 672
<223> n = A, T, C or G
<400> 40
actagtagtc agttgggagt ggttgctata ccttgacttc atttatatga atttccactt 60
tattaaataa tagaaaagaa aatcccggtg cttgcagtag agttatagga cattctatgc 120
ttacagaaaa tatagccatg attgaaatca aatagtaaag gctgttctgg ctttttatct 180
tettagetea tettaaataa gtagtaeact tgggatgeag tgegtetgaa gtgetaatea 240
gttgtaacaa tagcacaaat cgaacttagg atgtgtttct tctcttctgt gtttcgattt 300
tgatcaattc tttaattttg ggaacctata atacagtttt cctattcttg gagataaaaa 360
ttaaatggat cactgatatt taagtcattc tgcttctcat ctnaatattc catattctgt 420
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attagganaa antacctccc agcacagccc cctctcaaac cccacccaaa accaagcatt 480
tggaatgagt ctcctttatt tccgaantgt ggatggtata acccatatcn ctccaatttc 540
tgnttgggtt gggtattaat ttgaactgtg catgaaaagn ggnaatcttt nctttgggtc 600
aaantttncc ggttaatttg nctngncaaa tccaatttnc tttaagggtg tctttataaa 660
atttgctatt cngg
<210> 41
<211> 657
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 243, 247, 251, 261, 267, 272, 298, 312, 315, 421, 432, 434,
501, 524, 569, 594, 607, 650
<223> n = A, T, C or G
<400> 41
gaaacatgca agtaccacac actgtttgaa ttttgcacaa aaagtgactg tagggatcag 60
gtgatagccc cggaatgtac agtgtcttgg tgcaccaaga tgccttctaa aggctgacat 120
accttgggac cctaatgggg cagagagtat agccctagcc cagtggtgac atgaccactc 180
cctttgggag getgaagtta aagggaatgg tatgtgtttt eteatggaag eageacatga 240
atnggtnaca ngatgttaaa ntaaggntct antttgggtg tcttgtcatt tgaaaaantg 300
acacactcct ancanctggt aaaggggtgc tggaagccat ggaagaactc taaaaacatt 360
agcatgggct gatctgatta cttcctggca tcccgctcac ttttatggga agtcttatta 420
naaggatggg ananttttcc atateettge tgttggaact etggaacact etetaaattt 480
ccctctatta aaaatcactg nccttactac acttcctcct tganggaata gaaatggacc 540
tttctctqac ttaqttcttq qcatqqqanc caqcccaaat taaaatctqa cttntccqqt 600
ttctccnqaa ctcacctact tqaattqqta aaacctcctt tqqaattaqn aaaaacc
<210> 42
<211> 389
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 179, 317, 320
<223> n = A, T, C or G
<400> 42
actagtgctg aggaatgtaa acaagtttgc tgggccttgc gagacttcac caggttgttt 60
cqataqctca cactectgca ctgtgcctgt cacccaggaa tqtctttttt aattagaaga 120
caggaagaaa acaaaaacca gactgtgtcc cacaatcaga aacctccgtt gtggcagang 180
ggccttcacc gccaccaggg tgtcccgcca gacagggaga gactccagcc ttctgaggcc 240
atcctgaaga attcctgttt gggggttgtg aaggaaaatc acccggattt aaaaagatgc 300
tgttgcctgc ccgcgtngtn gggaagggac tggtttcctg gtgaatttct taaaagaaaa 360
atattttaag ttaagaaaaa aaaaaaaaa
                                                                   389
<210> 43
<211> 279
<212> DNA
<213> Homo sapiens
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<400> 43
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tactgtgtta gctctttgaa tgttcttgaa attttagact ttctttgtaa acaaataata 180
tgtccttatc attgtataaa agctgttatg tgcaacagtg tggagatcct tgtctgattt 240
aataaaatac ttaaacactg aaaaaaaaaa aaaaaaaaa
<210> 44
<211> 449
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 245, 256, 264, 266, 273, 281, 323, 325, 337, 393
<223> n = A, T, C \text{ or } G
<400> 44
actagtagca tcttttctac aacgttaaaa ttgcagaagt agcttatcat taaaaaacaa 60
caacaacaac aataacaata aatectaagt gtaaateagt tattetaece eetaecaagg 120
atateageet gtttttteee ttttttetee tgggaataat tgtgggette tteeeaaatt 180
totacagoot otttoctott otcatgottg agottocotg tttgcacgoa tgcqttqtgc 240
aagantgggc tgtttngctt ggantneggt cenagtggaa neatgettte eettgttact 300
gttggaagaa actcaaacct tcnancccta ggtgttncca ttttgtcaag tcatcactgt 360
atttttgtac tggcattaac aaaaaaagaa atnaaatatt gttccattaa actttaataa 420
aactttaaaa gggaaaaaaa aaaaaaaaa
                                                                    449
<210> 45
<211> 559
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 263
<223> n = A, T, C \text{ or } G
<400> 45
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cactcactga agtttttgag tcccagagag ccattctatg tcaaacattc caagtactct 120
ttgagagece ageattacat caacatgece gtgeagttea aacegaagte egeaggeaaa 180
tttgaagett tgettgteat teaaacagat gaaggeaaga gtattgetat tegaetaatt 240
ggtgaagctc ttggaaaaaa ttnactagaa tactttttgt gttaagttaa ttacataagt 300
tgtattttgt taactttatc tttctacact acaattatgc ttttgtatat atattttgta 360
tgatggatat ctataattgt agattttgtt tttacaagct aatactgaag actcgactga 420
aatattatgt atctagccca tagtattgta cttaactttt acagggtgaa aaaaaaattc 480
tgtgtttgca ttgattatga tattctgaat aaatatggga atatatttta atgtgggtaa 540
aaaaaaaaa aaaaaggaa
<210> 46
<211> 731
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> 270, 467, 477, 502, 635, 660, 671, 688, 695, 697, 725
<223> n = A, T, C or G
<400> 46
actagtteta gtaccatgge tgtcatagat gcaaccatta tattccattt agtttettee 60
tcaggttccc taacaattgt ttgaaactga atatatatgt ttatgtatgt gtgtgtgttc 120
actgtcatgt atatggtgta tatgggatgt gtgcagtttt cagttatata tatattcata 180
tatacatatg catatatatg tataatatac atatatacat gcatacactt gtataatata 240
catatatata cacatatatg cacacatatn atcactgagt tccaaagtga gtctttattt 300
ggggcaattg tattetetee etetgtetge teaetgggee tttgcaagae atageaattg 360
cttgatttcc tttggataag agtcttatct tcggcactct tgactctagc cttaacttta 420
gatttctatt ccagaatacc tctcatatct atcttaaaac ctaaganggg taaagangtc 480
ataagattgt agtatgaaag antttgctta gttaaattat atctcaggaa actcattcat 540
ctacaaatta aattgtaaaa tgatggtttg ttgtatctga aaaaatgttt agaacaagaa 600
atqtaactqq qtacctqtta tatcaaaqaa cctcnattta ttaaqtctcc tcataqccan 660
atcettatat ngccctctct gacctgantt aatananact tgaataatga atagttaatt 720
taggnttggg c
                                                                   731
<210> 47
<211> 640
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 5, 28, 106, 153, 158, 173, 176, 182, 189, 205, 210, 214,
225, 226, 229, 237, 260, 263, 269, 277, 281, 282, 322, 337,
338, 354, 365, 428, 441, 443, 456, 467, 476, 484, 503, 508,
554, 567, 575, 579, 588, 601, 606, 609, 611, 621, 636
<223> n = A, T, C or G
<400> 47
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cgttaataac teeteaggte eetgeetgea eagggttttt tettantttg ttgeetaaca 120
gtacaccaaa tgtgacatcc tttcaccaat atngattnct tcataccaca tcntcnatgg 180
anacqactnc aacaattttt tgatnacccn aaanactggg ggctnnaana agtacantct 240
ggagcagcat ggacctgtcn gcnactaang gaacaanagt nntgaacatt tacacaacct 300
ttggtatgtc ttactgaaag anagaaacat gcttctnncc ctagaccacg aggncaaccg 360
caganattgc caatgccaag tccgagcggt tagatcaggt aatacattcc atggatgcat 420
tacatacntt gtccccgaaa nanaagatgc cctaanggct tcttcanact ggtccngaaa 480
acanetacae etggtgettg ganaacanae tetttggaag ateatetgge acaagtteee 540
cccagtgggt tttnccttgg cacctanctt accanatena ttcggaance attetttgcc 600
                                                                   640
ntggcnttnt nttgggacca ntcttctcac aactgnaccc
<210> 48
<211> 257
<212> DNA
<213> Homo sapiens
<400> 48
actagtatat gaaaatgtaa atatcacttg tgtactcaaa caaaagttgg tettaagett 60
ccaccttgag cagccttgga aacctaacct gcctctttta gcataatcac attttctaaa 120
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tgattttctt tgttcctgaa aaagtgattt gtattagttt tacatttgtt ttttggaaga 180
ttatatttgt atatgtatca tcataaaata tttaaataaa aagtatcttt agagtgaaaa 240
                                                                   257
aaaaaaaaa aaaaaaa
<210> 49
<211> 652
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 410, 428, 496, 571, 647
<223> n = A, T, C or G
<400> 49
actagttcag atgagtggct gctgaagggg cccccttgtc attttcatta taacccaatt 60
tccacttatt tgaactctta agtcataaat gtataatgac ttatgaatta gcacagttaa 120
qttgacacta qaaactgccc atttctgtat tacactatca aataggaaac attggaaaga 180
tggggaaaaa aatcttattt taaaatggct tagaaagttt tcagattact ttgaaaattc 240
taaacttctt tctgtttcca aaacttgaaa atatgtagat ggactcatgc attaagactg 300
ttttcaaagc tttcctcaca tttttaaagt gtgattttcc ttttaatata catatttatt 360
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aacagcangg ttattgaagc agctttctca aatgttgctt cagatgtgca agttgcaaat 480
tttattgtat ttgtanaata caatttttgt tttaaactgt atttcaatct atttctccaa 540
gatgetttte atatagagtg aaatateeca ngataaetge ttetgtgteg tegeatttga 600
cgcataactg cacaaatgaa cagtgtatac ctcrtggttg tgcattnacc cc
<210> 50
<211> 650
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 237, 270, 311, 443, 454, 488, 520, 535, 539, 556, 567, 594,
603, 634
<223> n = A, T, C or G
<400> 50
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tgttgagtaa aaaggagatg cccaatattc aaagctgcta aatgttctct ttgccataaa 120
gactccgtgt aactgtgtga acacttggga tttttctcct ctgtcccgag gtcgtcgtct 180
gctttctttt ttgggttctt tctagaagat tgagaaatgc atatgacagg ctgagancac 240
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ggctcctgga nggctgcctg ggggaggcag acatgggagt gccaaggtgg ccagatggtt 360
ccaggactac aatgtettta tttttaactg tttgccactg etgeecteae eeetgeeegg 420
ctctggagta ccgtctgccc canacaagtg ggantgaaat gggggtgggg gggaacactg 480
attcccantt agggggtgcc taactgaaca gtagggatan aaggtgtgaa cctgngaant 540
gcttttataa attatnttcc ttgttanatt tattttttaa tttaatctct gttnaactgc 600
ccngggaaaa ggggaaaaaa aaaaaaaaat tctntttaaa cacatgaaca
<210> 51
<211> 545
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> 66, 159, 195, 205, 214, 243, 278, 298, 306, 337, 366, 375,
382, 405, 446, 477, 492, 495, 503, 507, 508, 521, 537
<223> n = A, T, C or G
<400> 51
tgqcgtgcaa ccagggtagc tgaaqtttgg gtctgggact ggagattggc cattaggcct 60
cetganatte cagetecett ceaceaagee cagtettget aegtggeaca gggeaaacet 120
gactcccttt gggcctcagt ttcccctccc cttcatgana tgaaaagaat actacttttt 180
cttgttggtc taacnttgct ggacncaaag tgtngtcatt attgttgtat tgggtgatgt 240
qtncaaaact qcaqaaqctc actqcctatq aqaqqaanta aqaqaqataq tqqatqanaq 300
ggacanaagg agtcattatt tggtatagat ccaccentee caacetttet etecteagte 360
cctgcncctc atgtntctgg tntggtgagt cctttgtgcc accanccatc atgctttgca 420
ttgctgccat cctgggaagg gggtgnatcg tctcacaact tgttgtcatc gtttganatg 480
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caaaa
                                                                    545
<210> 52
<211> 678
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 98, \overline{1}19, 121, 131, 136, 139, 140, 142, 143, 163, 168, 172,
176, 184, 189, 190, 191, 200, 201, 205, 207, 221, 223, 229,
230, 237, 240, 241, 255, 264, 266, 267, 276, 280, 288, 289,
291, 297, 301, 306, 308, 314, 315, 326, 332, 335, 337
<223> n = A, T, C or G
<221> misc feature
<222> 339, 341, 343, 344, 345, 347, 350, 355, 356, 358, 362, 363,
372, 379, 395, 397, 398, 400, 403, 412, 414, 421, 423, 431,
435, 438, 439, 450, 457, 463, 467, 471, 474, 480, 483, 484,
487, 490, 491, 492, 493, 499, 500, 504, 508, 518, 536
<223> n = A, T, C or G
<221> misc feature
<222> 538, 549, 551, 552, 554, 556, 557, 562, 563, 567, 571, 572,
576, 579, 590, 592, 595, 598, 606, 609, 613, 620, 622, 624,
626, 631, 634, 638, 641, 647, 654, 660, 661, 674
<223> n = A, T, C or G
<400> 52
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ntateteeat ntecantgnn enntgtegee tetteeeteg teneattnga anttanteee 180
tggnccccnn necetetecn neetneneet ecceetecg nenecteenn etttttntan 240
nettececat eteenteece cetnanngte ceaacneegn cageaatnne neaettnete 300
ncteenence teenneegtt ettetnttet enaentntne nennntneen tgeenntnaa 360
annotetece energeaane gattetetee eteenennan ethteeaete entnettete 420
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nenegeteet nttentenne ceaecteten cettegneee cantaenete neenecettn 480
egnntenttn nnnteetenn acenecenee teeettenee eetettetee eeggtntnte 540
tetetecene nnenenneet ennecentee nngegneent tteegeeeen enceneentt 600
cettentene cantecaten entntnecat netnectnee neteacneee getneeceen 660
ntctctttca cacngtcc
<210> 53
<211> 502
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 139, 146, 215, 217, 257, 263, 289, 386, 420, 452, 457, 461,
466, 482, 486
<223> n = A,T,C or G
<400> 53
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caageegtac ccaaagtete gettetgeeg aggtgteeet gatgeeaaaa ttegeatttt 120
tgacctgggg cggaaaaang caaaantgga tgagtctccg ctttgtggcc acatggtgtc 180
agatcaatat gagcagctgt cctctgaagc cctgnangct gcccgaattt gtgccaataa 240
gtacatggta aaaagtngtg gcnaagatgc ttccatatcc gggtgcggnt ccaccccttc 300
cacgteatee geateaacaa gatgttgtee tgtgetgggg etgacagget eecaacagge 360
atgcgaagtg cetttggaaa acceanggea etgtggeeag ggtteacatt gggeeaattn 420
atcatgttca tccgcaccaa ctgcagaaca angaacntgt naattnaagc cctgcccagg 480
gncaanttca aatttcccgg cc
                                                                   502
<210> 54
<211> 494
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 431, 442, 445
<223> n = A, T, C or G
<400> 54
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tttaatgcca aaagtttgct ttgtccacaa tttccttaag acctcttcag aaagggattt 120
gtttgcctta atgaatactg ttgggaaaaa acacagtata atgagtgaaa agggcagaag 180
caagaaattt ctacatctta gcgactccaa gaagaatgag tatccacatt tagatggcac 240
attatgagga ctttaatctt teettaaaca caataatgtt ttetttttte ttttatteac 300
atgatttcta agtatatttt tcatgcagga cagtttttca accttgatgt acagtgactg 360
tgttaaattt ttctttcagt ggcaacctct ataatcttta aaatatggtg agcatcttgt 420
ctgttttgaa ngggatatga cnatnaatct atcagatggg aaatcctgtt tccaagttag 480
aaaaaaaaa aaaa
                                                                   494
<210> 55
<211> 606
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> 375, 395, 511, 542, 559, 569, 578, 581
<223> n = A, T, C or G
<400> 55
actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgttagatta atgtatttgt 120
tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
caqttttqca taattataat cggcattqta cataqaaaqq atatqqctac cttttqttaa 300
atctgcactt tctaaatatc aaaaaaggga aatgaagtat aaatcaattt ttgtataatc 360
tgtttgaaac atgantttta tttgcttaat attanggett tgcccttttc tgttagtctc 420
ttqqqatcct qtqtaaaact qttctcatta aacaccaaac aqttaaqtcc attctctqqt 480
actagetaca aatteegttt catattetae ntaacaattt aaattaactg aaatatttet 540
anatggtcta cttctgtcnt ataaaaacna aacttgantt nccaaaaaaa aaaaaaaaa 600
aaaaaa
                                                                   606
<210> 56
<211> 183
<212> DNA
<213> Homo sapiens
<400> 56
actagtatat ttaaacttac aggettattt gtaatgtaaa ccaccatttt aatgtactgt 60
aattaacatg gttataatac gtacaatcct tccctcatcc catcacacaa ctttttttgt 120
gtgtgataaa ctgattttgg tttgcaataa aaccttgaaa aataaaaaaaa aaaaaaaaa 180
aaa
                                                                   183
<210> 57
<211> 622
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 358, 368, 412, 414, 425, 430, 453, 455, 469, 475, 495, 499,
529, 540, 564, 575, 590
<223> n = A, T, C or G
<400> 57
actagtcact actgtcttct ccttgtagct aatcaatcaa tattcttccc ttgcctgtgg 60
gcagtggaga gtgctgctgg gtgtacgctg cacctgccca ctgagttggg gaaagaggat 120
aatcagtgag cactgttctg ctcagagctc ctgatctacc ccaccccta ggatccagga 180
ctgggtcaaa gctgcatgaa accaggccct ggcagcaacc tgggaatggc tggaggtggg 240
agagaacctg acttetettt eceteteeet ecteeaacat taetggaact etateetgtt 300
agggatette tgagettgtt teeetgetgg gtgggacaga agacaaagga gaagggangg 360
tetacaanaa geageeette tttgteetet ggggttaatg agettgaeet anantteatg 420
gaganaccan aagcctctga tttttaattt ccntnaaatg tttgaagtnt atatntacat 480
atatatattt ctttnaatnt ttgagtcttt gatatgtctt aaaatccant ccctctgccn 540
qaaacctqaa ttaaaaccat qaanaaaaat qtttncctta aaqatqttan taattaattq 600
aaacttgaaa aaaaaaaaaa aa
                                                                   622
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<211> 433
<212> DNA
<213> Homo sapiens
<400> 58
gaacaaattc tgattggtta tgtaccgtca aaagacttga agaaatttca tgattttgca 60
gtgtggaage gttgaaaatt gaaagttaet getttteeae ttgeteatat agtaaaggga 120
teettteage tgeeagtgtt gaataatgta teateeagag tgatgttate tgtgaeagte 180
accagettta agetgaacca ttttatgaat accaaataaa tagaeetett gtaetgaaaa 240
catatttgtg actttaatcg tgctgcttgg atagaaatat ttttactggt tcttctgaat 300
tgacagtaaa cctgtccatt atgaatggcc tactgttcta ttatttgttt tgacttgaat 360
ttatccacca aagacttcat ttgtgtatca tcaataaagt tgtatgtttc aactgaaaaa 420
aaaaaaaaa aaa
                                                                   433
<210> 59
<211> 649
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 22, 190, 217, 430, 433, 484, 544, 550, 577, 583, 594
<223> n = A, T, C or G
<400> 59
actagttatt atctgacttt enggttataa teattetaat gagtgtgaag tageetetgg 60
tgtcatttgg atttgcattt ctctgatgag tgatgctatc aagcaccttt gctggtgctg 120
ttggccatat gtgtatgttc cctggagaag tgtctgtgct gagccttggc ccacttttta 180
attaggegtn tgtettttta ttactgagtt gtaagantte tttatatatt etggatteta 240
gaccettate agatacatgg tttgcaaata tttteteeca ttetgtgggt tgtgttttea 300
ctttatcgat aatgtcctta gacatataat aaatttgtat tttaaaagtg acttgatttg 360
ggctgtgcaa ggtgggctca cgcttgtaat cccagcactt tgggagactg aggtgggtgg 420
atcatatgan gangctagga gttcgaggtc agcctggcca gcatagcgaa aacttgtctc 480
tacnaaaaat acaaaaatta gtcaggcatg gtggtgcacg tctgtaatac cagcttctca 540
ggangetgan geacaaggat caettgaace eeagaangaa gangttgeag tganetgaag 600
atcatgccag ggcaacaaaa atgagaactt gtttaaaaaa aaaaaaaaa
                                                                   649
<210> 60
<211> 423
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 209, 222, 277, 389, 398
<223> n = A, T, C or G
<400> 60
actagttcag gccttccagt tcactgacaa acatggggaa gtgtgcccag ctggctggaa 60
acctggcagt gataccatca agcctgatgt ccaaaagagc aaagaatatt tctccaagca 120
gaagtgageg etgggetgtt ttagtgeeag getgeggtgg geageeatga gaacaaaace 180
tettetgtat tttttttte cattagtana acacaagaet engatteage egaattgtgg 240
tgtcttacaa ggcagggctt tcctacaggg ggtgganaaa acagcctttc ttcctttggt 300
aggaatggcc tgagttggcg ttgtgggcag gctactggtt tgtatgatgt attagtagag 360
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caacccatta atcttttgta gtttgtatna aacttganct gagaccttaa acaaaaaaaa 420
                                                              423
aaa
<210> 61
<211> 423
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 195, 285, 295, 329, 335, 340, 347, 367, 382, 383, 391, 396,
<223> n = A, T, C \text{ or } G
<400> 61
egggaetgga atgtaaagtg aagtteggag etetgageae gggetettee egeegggtee 60
caggitetgag tatggetggg agteggggge cacaggeete tagetgtget geteaagaag 180
actggatcag ggtanctaca agtggccggg ccttgccttt gggattctac cctgttccta 240
atttggtgtt ggggtgcggg gtccctggcc cccttttcca cactnectcc ctccngacag 300
caaceteect tggggeaatt gggeetggnt eteeneeegn tgttgenaee etttgttggt 360
ttaaggnett taaaaatgtt anntttteee ntgeengggt taaaaaagga aaaaactnaa 420
                                                              423
aaa
<210> 62
<211> 683
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 218, 291, 305, 411, 416, 441, 443, 453, 522, 523, 536, 542,
547, 566, 588, 592, 595, 603, 621, 628, 630, 632, 644, 645,
648, 655, 660, 672, 674, 676, 677, 683
<223> n = A,T,C or G
<400> 62
gctggagagg ggtacggact ttcttggagt tgtcccaggt tggaatgaga ctgaactcaa 60
gaagagaccc taagagactg gggaatggtt cctgccttca ggaaagtgaa agacgcttag 120
getgteaaca ettaaaggaa gteeeettga ageeeagagt ggacagaeta gacceattga 180
tggggccact ggccatggtc cgtggacaag acattcengt gggccatggc acaccggggg 240
tgtenttgga etttetteee atteeeteet eeceaaatge aetteeeete eteeetetge 360
coctcotqtq tttttqqaat tctqtttccc tcaaaattqt taatttttta nttttnqacc 420
atgaacttat gtttggggtc nangttcccc ttnccaatgc atactaatat attaatggtt 480
atttattttt gaaatatttt ttaatgaact tggaaaaaat tnntggaatt tccttncttc 540
cnttttnttt gggggggtg gggggntggg ttaaaatttt tttggaancc cnatnggaaa 600
ttnttacttg gggccccct naaaaaantn anttccaatt cttnnatngc ccctnttccn 660
                                                              683
ctaaaaaaaa ananannaaa aan
<210> 63
<211> 731
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> 237, 249, 263, 288, 312, 317, 323, 326, 337, 352, 362, 370,
377, 400, 411, 414, 434, 436, 446, 457, 473, 486, 497, 498,
502, 512, 531, 546, 554, 563, 565, 566, 588, 597, 608, 611,
613, 615, 627, 632, 640, 641, 644, 654, 660, 663, 665
<223> n = A, T, C or G
<221> misc feature
<222> 671, 678, 692, 697, 698, 699, 704, 705, 712, 714, 717, 718,
719, 723, 725, 730, 731
<223> n = A, T, C or G
<400> 63
actagtcata aagggtgtgc gcgtcttcga cgtggcggtc ttggcgccac tgctgcgaga 60
eccggeeetg gaeeteaagg teateeactt ggtgegtgat eeccgegegg tggegagtte 120
acggateege tegegeeacg geeteateeg tgagageeta caggtggtge geageegaga 180
ccgcgagctc accgcatgcc cttcttggag gccgcgggcc acaagcttgg cgcccanaaa 240
gaaggegtng ggggeeegea aantaceaeg etetgggege tatggaangt eetettgeaa 300
taatattggt tnaaaanctg canaanagcc cctgcanccc cctgaactgg gntgcagggc 360
cncttacctn gtttggntgc ggttacaaag aacctgtttn ggaaaaccct nccnaaaacc 420
ttccgggaaa attntncaaa tttttnttgg ggaattnttg ggtaaacccc ccnaaaatgg 480
gaaacntttt tgccctnnaa antaaaccat tnggttccgg gggccccccc ncaaaaccct 540
tttttntttt tttntgcccc cantnncccc ccggggcccc tttttttngg ggaaaanccc 600
coccectnee nanantttta aaagggnggg anaatttttn nttnecece gggneeceen 660
ggngntaaaa nggtttcncc cccccgaggg gnggggnnnc ctcnnaaacc cntntcnnna 720
concuttttn n
                                                                   731
<210> 64
<211> 313
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 240
<223> n = A, T, C or G
<400> 64
actagttgtg caaaccacga ctgaagaaag acgaaaagtg ggaaataact tgcaacgtct 60
gttagagatg gttgctacac atgttgggtc tgtagagaaa catcttgagg agcagattgc 120
taaagttgat agagaatatg aagaatgcat gtcagaagat ctctcggaaa atattaaaga 180
gattagagat aagtatgaga agaaagctac tctaattaag tcttctgaag aatgaagatn 240
aaatgttgat catgtatata tatccatagt gaataaaatt gtctcagtaa agttgtaaaa 300
aaaaaaaaa aaa
                                                                   313
<210> 65
<211> 420
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> 400, 402, 403, 404, 405, 406, 409, 411, 412, 414, 415, 416
<223> n = A, T, C or G
<400> 65
actagttccc tggcaggcaa gggcttccaa ctgaggcagt gcatgtgtgg cagagagagg 60
caggaagetg geagtggeag ettetgtgte tagggagggg tgtggeteee teetteeetg 120
totgggaggt tggagggaag aatctaggce ttagettgce etcetgecae cetteecett 180
gtagatactg ccttaacact ccctcctct tcagctgtgg ctgccaccca agccaggttt 240
ctccgtgctc actaatttat ttccaggaaa ggtgtgtgga agacatgagc cgtgtataat 300
atttqtttta acattttcat tqcaaqtatt qaccatcatc cttqqttqtq tatcqttqta 360
acacaaatta atqatattaa aaagcatcca aacaaagccn annnnnaana nnannngaaa 420
<210> 66
<211> 676
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 328, 454, 505, 555, 586, 612, 636, 641
<223> n = A, T, C or G
<400> 66
actagtttcc tatgatcatt aaactcattc tcagggttaa gaaaggaatg taaatttctg 60
cctcaatttg tacttcatca ataagttttt gaagagtgca gatttttagt caggtcttaa 120
aaataaactc acaaatctgg atgcatttct aaattctgca aatgtttcct ggggtgactt 180
aacaaggaat aatcccacaa tatacctagc tacctaatac atggagctgg ggctcaaccc 240
actgttttta aggatttgcg cttacttgtg gctgaggaaa aataagtagt tccgagggaa 300
gtagttttta aatgtgagct tatagatngg aaacagaata tcaacttaat tatggaaatt 360
gttagaaacc tgttctcttg ttatctgaat cttgattgca attactattg tactggatag 420
actocagooo attgcaaagt ctcagatato ttanctgtgt agttgaatto cttggaaatt 480
ctttttaaga aaaaattgga gtttnaaaga aataaacccc tttgttaaat gaagcttggc 540
tttttggtga aaaanaatca tcccgcaggg cttattgttt aaaaanggaa ttttaagcct 600
ccctggaaaa anttgttaat taaatgggga aaatgntggg naaaaattat ccgttagggt 660
ttaaaqqqaa aactta
                                                                   676
<210> 67
<211> 620
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 419, 493, 519, 568, 605, 610
<223> n = A, T, C or G
<400> 67
caccattaaa getgettaee aagaaettee eeageatttt gaetteettg tttgataget 60
gaattgtgag caggtgatag aagagcettt etagttgaac atacagataa tttgetgaat 120
acattccatt taatqaaqqq qttacatctq ttacqaaqct actaaqaaqq aqcaaqaqca 180
taggggaaaa aaatctgatc agaacgcatc aaactcacat gtgccccctc tactacaaac 240
agattgtagt gctgtggtgg tttattccgt tgtgcagaac ttgcaagctg agtcactaaa 300
cccaaagaga ggaaattata ggttagttaa acattgtaat cccaggaact aagtttaatt 360
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cacttttgaa gtgttttgtt ttttattttt ggtttgtctg atttactttg ggggaaaang 420
ctaaaaaaaa agggatatca atctctaatt cagtgcccac taaaagttgt ccctaaaaag 480
tetttaetgg aanttatggg actttttaag etceaggtnt tttggteete caaattaace 540
ttgcatgggc cccttaaaat tgttgaangg cattcctgcc tctaagtttg gggaaaattc 600
ccccnttttn aaaatttgga
                                                                620
<210> 68
<211> 551
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 286, 464, 480, 501, 502, 518, 528, 533, 536, 537, 538, 539,
540, 541, 543, 544, 545, 547, 548, 549
<223> n = A, T, C or G
<400> 68
actagtaget ggtacataat cactgaggag ctatttetta acatgetttt atagaccatg 60
ctaatqctag accagtattt aagggctaat ctcacacctc cttagctgta agagtctggc 120
ttagaacaga cetetetgtg caataacttg tggccactgg aaatecetgg geeggcattt 180
gtattggggt tgcaatgact cccaagggcc aaaagagtta aaggcacgac tgggatttct 240
tetgagaetg tggtgaaaet cetteeaagg etgagggggt eagtangtge tetgggaggg 300
actoggoaco actttgatat toaacaagoo acttgaagoo caattataaa attgttattt 360
tacagetgat ggaactcaat ttgaacette aaaactttgt tagtttatee tattatattg 420
ttaaacctaa ttacatttqt ctaqcattqq atttqqttcc tqtnqcatat qtttttttcn 480
cctatgtgct cccctcccc nnatcttaat ttaaaccnca attttgcnat tcnccnnnnn 540
nannnannna a
                                                                551
<210> 69
<211> 396
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 235, 310, 323, 381
<223> n = A, T, C or G
<400> 69
cagaaatgga aagcagagtt ttcatttctg tttataaacg tctccaaaca aaaatggaaa 60
gtatgtggga tattgaatgt taaagggata tttttttcta ttatttttat aattgtacaa 180
aattaagcaa atgttaaaag ttttatatgc tttattaatg ttttcaaaag gtatnataca 240
tgtgatacat titttaaget teagitgett giettetggt actitetgit atgggetitt 300
ggggagccan aaaccaatct acnatctett tttgtttgcc aggacatgca ataaaattta 360
                                                                 396
aaaaaataaat aaaaactatt nagaaattga aaaaaa
<210> 70
<211> 536
<212> DNA
<213> Homo sapiens
<220>
```

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<221> misc feature
<222> 388, 446, 455
<223> n = A, T, C or G
<400> 70
actagtgcaa aagcaaatat aaacatcgaa aaggcgttcc tcacgttagc tgaagatatc 60
cttcqaaaqa cccctgtaaa aqaqcccaac agtgaaaatg tagatatcag cagtggagga 120
ggcgtgacag gctggaagag caaatgctgc tgagcattct cctgttccat cagttgccat 180
ccactacccc qttttctctt cttqctqcaa aataaaccac tctqtccatt tttaactcta 240
aacagatatt tttgtttctc atcttaacta tccaagccac ctattttatt tgttctttca 300
tetgtgaetg ettgetgaet ttateataat tttetteaaa caaaaaaatg tatagaaaaa 360
tcatgtctgt gacttcattt ttaaatgnta cttgctcagc tcaactgcat ttcagttgtt 420
ttatagtcca gttcttatca acattnaaac ctatngcaat catttcaaat ctattctgca 480
aattgtataa gaataaaagt tagaatttaa caattaaaaa aaaaaaaaa aaaaaa
<210> 71
<211> 865
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 22, \overline{3}5, 39, 56, 131, 138, 146, 183, 194, 197, 238, 269, 277,
282, 297, 316, 331, 336, 340, 341, 346, 349, 370, 376, 381,
382, 392, 396, 397, 401, 433, 444, 445, 454, 455, 469, 472,
477, 480, 482, 489, 497, 499, 511, 522, 526, 527
<223> n = A, T, C or G
<221> misc feature
<222> 545, 553, 556, 567, 574, 580, 610, 613, 634, 638, 639, 663,
672, 689, 693, 694, 701, 704, 713, 723, 729, 732, 743, 744,
749, 761, 765, 767, 769, 772, 774, 780, 783, 788, 792, 803,
810, 824, 840, 848
<223> n = A, T, C or G
<400> 71
gacaaagcgt taggagaaga anagaggcag ggaanactnc ccaggcacga tggccncctt 60
cccaccagca accagegece eccaceagee eccaggeeg gaegaegaag actecateet 120
ggattaatct nacctctntc gcctgnccca ttcctacctc ggaggtggag gccggaaagg 180
tencaccaag aganaanetg etgecaacae caacegeece ageeetggeg ggeaeganag 240
gaaactggtg accaatctgc agaattctna gaggaanaag cnaggggccc cgcgctnaga 300
cagagetgga tatgangcca gaccatggac nctacnecen ncaatneana egggaetgeg 360
gaagatggan gaccenegae nngateagge engetnneea neecceeace cetatgaatt 420
attecegetg aangaatete tgannggett eeannaaage geeteeeene enaaegnaan 480
tncaacatng ggattanang ctgggaactg naaggggcaa ancetnnaat atececagaa 540
acaanctote cenaanaaac tggggeneet catnggtggn accaactatt aactaaaccg 600
cacgccaagn aantataaaa ggggggcccc tccncggnng accccctttt gtcccttaat 660
ganggttate enecttgegt accatggtne cennttetgt ntgnatgttt ceneteceet 720
concetatnt enageegaac tennatttne eegggggtge natenantng thencetttn 780
ttngttgncc engecettte egneggaach egttteeeeg ttantaaegg eaeceggggn 840
aagggtgntt ggcccctcc ctccc
<210> 72
<211> 560
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<212> DNA

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<213> Homo sapiens
     <220>
     <221> misc feature
     <222> 83, 173, 183, 186, 209, 211, 215, 255, 321, 322, 323, 335,
     344, 357, 361, 368, 394, 412, 415, 442, 455, 469, 472, 475,
     487, 513, 522, 528, 531, 534, 546
     <223> n = A, T, C or G
     <400> 72
     cetqqacttq tettqqttee aqaacetqae qaeeeqqeqa eqqeqaeqte tettttqaet 60
     aaaagacagt gtccagtgct congectagg agtctacggg gaccgcctcc cgcgccgcca 120
     ccatgcccaa cttctctggc aactggaaaa tcatccgatc ggaaaacttc gangaattgc 180
     tenaantget gggggtgaat gtgatgetna ngaanattge tgtggetgea gegteeaage 240
     cagcagtgga gatchaacag gagggagaca ctttctacat caaaacctcc accaccgtgc 300
     gcaccacaaa gattaacttc nnngttgggg aggantttga ggancaaact gtggatngga 360
     ngcctgtnaa aacctggtga aatgggagaa tganaataaa atggtctgtg ancanaaact 420
     cctgaaagga gaaggcccc anaactcctg gaccngaaaa actgacccnc cnatngggga 480
     actgatnett gaaccetgaa egggegggat ganeettttt thttgeenee naangggtte 540
     tttccntttc cccaaaaaaa
                                                                         560
     <210> 73
     <211> 379
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     <212> DNA
<213> Homo sapiens
3 2 E
     <220>
<221> misc feature
     <222> 8, 17, 18, 21, 26, 29, 30, 32, 53, 56, 67, 71, 81, 102, 104,
17,
     111, 112, 114, 119, 122, 124, 125, 134, 144, 146, 189, 190,
113
     214, 215, 219, 220, 235, 237, 246, 280, 288, 302, 310, 313,
155
     319, 322, 343, 353, 354
ļ
     <223> n = A, T, C or G
     <400> 73
     ctggggancc ggcggtnngc nccatntcnn gncgcgaagg tggcaataaa aancenctga 60
     aaccgcncaa naaacatgcc naagatatgg acgaggaaga tngngctttc nngnacaanc 120
     gnanngagga acanaacaaa etenangage teteaageta atgeegeggg gaaggggeee 180
     ttggccacnn gtggaattaa gaaatctggc aaanngtann tgttccttgt gcctnangag 240
     ataagngacc ctttatttca tctgtattta aacctctctn ttccctgnca taacttcttt 300
     tnccacgtan agntggaant anttgttgtc ttggactgtt gtncatttta gannaaactt 360
                                                                         379
     ttgttcaaaa aaaaaataa
     <210> 74
     <211> 437
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> 145, 355
     <223> n = A, T, C or G
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<400> 74
actaqttcaq actqccacqc caaccccaqa aaatacccca catqccaqaa aaqtqaaqtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggcctcgcga taaaaacaaa 120
acaaaaaaac getgecaggt tttanaagca gttetggtet caaaaccate aggateetge 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
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gaataagtta taatcagtat tcatctcttt gttttttgtc actcttttct ctctnattgt 360
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aaaaaaaaa aaaaaaa
<210> 75
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<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> 440, 513, 539, 551
<223> n = A, T, C or G
<400> 75
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gacccagcac atcgccgacc aggtgaggtc ccagcttgaa gagaaagaaa acaagaagtt 120
ccctgtgttt aaggccgtgt cattcaagag ccaggtggtc gcggggacaa actacttcat 180
caaggtgcac gtcggcgacg aggacttcgt acacctgcga gtgttccaat ctctccctca 240
tgaaaacaag cccttgacct tatctaacta ccagaccaac aaagccaagc atgatgagct 300
gacctatttc tgatcctgac tttggacaag gcccttcagc cagaagactg acaaagtcat 360
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ccttggggtg gaaggggcan gatctgcact gcttttgcat ttctcttcct aaatttcatt 480
gtgttgattc tttccttcca ataggtgatc ttnattactt tcagaatatt ttccaaatna 540
gatatatttt naaaatcctt aaaaaaaaaa aaaaaaaaa
                                                                   579
<210> 76
<211> 666
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 411, 470, 476, 491, 506, 527, 560, 570, 632, 636, 643, 650,
654, 658
<223> n = A, T, C or G
<400> 76
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ttgatgttgt tatgggcagg atggcaacca gaccattgtc tcagagcagg tgctggctct 180
ttcctggcta ctccatgttg gctagcctct ggtaacctct tacttattat cttcaggaca 240
ctcactacag ggaccaggga tgatgcaaca tccttgtctt tttatgacag gatgtttgct 300
cagettetee aacaataaaa ageaegtggt aaaacaettg eggatattet ggaetgtttt 360
taaaaaaatat acagtttacc gaaaatcata ttatcttaca atgaaaagga ntttatagat 420
cagccagtga acaacctttt cccaccatac aaaaattcct tttcccgaan gaaaanggct 480
ttctcaataa neetcaettt ettaanatet tacaagatag eeeeganate ttategaaae 540
tcattttagg caaatatgan ttttattgtn cgttacttgt ttcaaaattt ggtattgtga 600
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atatcaatta ccaccccat ctcccatqaa anaaanggga aanggtgaan ttcntaancg 660
cttaaa
<210> 77
<211> 396
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 31, \overline{5}4, 125, 128, 136, 163, 168, 198
<223> n = A, T, C or G
<400> 77
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atcattgccc aaagttgcac ttgctggtct cttgggattt ggccttggaa aggtatcata 120
catanganta tgccanaata aattccattt ttttgaaaat canctccntg gggctggttt 180
tggtccacag cataacangc actgcctcct tacctgtgag gaatgcaaaa taaagcatgg 240
attaagtgag aagggagact ctcagccttc agcttcctaa attctgtgtc tgtgactttc 300
gaagtttttt aaacctctga atttgtacac atttaaaatt tcaagtgtac tttaaaataa 360
aatacttcta atgggaacaa aaaaaaaaa aaaaaa
                                                                    396
<210> 78
<211> 793
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 309, 492, 563, 657, 660, 703, 708, 710, 711, 732, 740, 748,
758, 762, 765, 787
<223> n = A, T, C or G
<400> 78
gcatectage egeogaetea cacaaqqeaq qtqqqtqaqq aaatecaqaq ttqecatqqa 60
gaaaattcca gtgtcagcat tcttgctcct tgtggccctc tcctacactc tggccagaga 120
taccacagte aaacetggag ccaaaaagga cacaaaggae tetegaceca aactgeecca 180
gaccetetee agaggttggg gtgaccaact catetggact caqacatatg aaqaagetet 240
atataaatcc aagacaagca acaaaccctt gatgattatt catcacttgg atgagtgccc 300
acacagtena getttaaaga aagtgtttge tgaaaataaa gaaatecaga aattggeaga 360
gcagtttgtc ctcctcaatc tggtttatga aacaactgac aaacaccttt ctcctgatgg 420
ccagtatgtc ccaggattat gtttgttgac ccatctctga cagttgaagc cgatatcctg 480
ggaagatatt cnaaccgtct ctatgcttac aaactgcaga tacgctctgt tgcttgacac 540
atgaaaaagc totcaagttg otnaaaatga attgtaagaa aaaaaatoto cagoottotg 600
tctgtcggct tgaaaattga aaccagaaaa atgtgaaaaa tggctattgt ggaacanatn 660
gacacctgat taggttttgg ttatgttcac cactattttt aanaaaanan nttttaaaat 720
ttggttcaat tntctttttn aaacaatntg tttctacntt gnganctgat ttctaaaaaa 780
aataatnttt ggc
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<210> 79
<211> 456
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> 89, 195, 255, 263, 266, 286, 353, 384, 423, 425, 436, 441
<223> n = A, T, C or G
<400> 79
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ctccgtggag agggactggc agagctgang ccacctgggg ctggggatcc cactettett 120
gcagctgttg agegeaceta accaetggte atgeececae ecetgetete egeaceeget 180
tecteeegae eecangaeea ggetaettet eeesteetet tgeeteeete etgeeeetge 240
tgcctctgat cgtangaatt gangantgtc ccgccttgtg gctganaatg gacagtggca 300
ggggctggaa atgggtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gcncccccc 360
tgcaagaccg agattgaggg aaancatgtc tgctgggtgt gaccatgttt cctctccata 420
                                                                 456
aantncccct gtgacnctca naaaaaaaaa aaaaaa
<210> 80
<211> 284
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 283
<223> n = A, T, C or G
<400> 80
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gaatagcatg acctccgtgc aaacaggaca agcaaatttg tgatgtgttg attaaaaaga 180
aataaataaa tgtgtatatg tgtaacttgt atgtttatgt ggaatacaga ttgggaaata 240
<210> 81
<211> 671
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 388, 505, 600, 603, 615, 642, 644, 660
<223> n = A, T, C or G
<400> 81
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agcaageggt gtgcacaegg agacteateg ttataattta etatetgeea agagtagaaa 120
gaaaggctgg ggatatttgg gttggcttgg ttttgatttt ttgcttgttt gtttgttttg 180
tactaaaaca gtattatctt ttgaatatcg tagggacata agtatataca tgttatccaa 240
tcaagatggc tagaatggtg cetttetgag tgtetaaaac ttgacaceee tggtaaatet 300
ttcaacacac ttccactgcc tgcgtaatga agttttgatt catttttaac cactggaatt 360
tttcaatgcc gtcattttca gttagatnat tttgcacttt gagattaaaa tgccatgtct 420
atttgattag tettattttt ttattttae aggettatea gteteaetgt tggetgteat 480
tgtgacaaag tcaaataaac ccccnaggac aacacacagt atgggatcac atattgtttg 540
acattaagct ttggccaaaa aatgttgcat gtgttttacc tcgacttgct aaatcaatan 600
canaaaggct ggctnataat gttggtggtg aaataattaa tnantaacca aaaaaaaaan 660
```

```
orms area, since more core, core, in care, or the property of the party of the part
```

```
671
aaaaaaaaaa a
<210> 82
<211> 217
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 35
<223> n = A, T, C or G
<400> 82
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agacaataag tggtggtgta tcttgtttct aataagataa acttttttgt ctttgcttta 120
tcttattagg gagttgtatg tcagtgtata aaacatactg tgtggtataa caggcttaat 180
                                                                   217
aaattottta aaaggaaaaa aaaaaaaaa aaaaaaa
<210> 83
<211> 460
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 104, 118, 172, 401, 422, 423, 444, 449
<223> n = A, T, C or G
<400> 83
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aacggagacg caggagaaga acaccctgcc gaccaaagag accattgagc angagaagcg 180
gagtgaaatt teetaagate etggaggatt teetaeeeee gteetetteg agaeeeeagt 240
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etgggeacte egegeegatg ceaeeggeet gtgggtetet gaagggaeee eeceeaateg 360
qactqccaaa ttctccqqtt tqccccqqqa tattatacaa nattatttqt atqaataatq 420
annataaaac acacctcgtg qcancaaana aaaaaaaaaa
<210> 84
<211> 323
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 70, 138, 178, 197, 228, 242, 244, 287, 311
<223> n = A, T, C or G
<400> 84
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gtggtccaan gcattttgct ggcttaacgg gtcccggaac aaaggacacc agctctctaa 120
aattgaagtt tacceganat aacaatettt tgggeagaga tgeetatttt aacaaaenee 180
gtccctgcgc aacaacnaac aatctctggg aaataccggc catgaacntg ctgtctcaat 240
chancatote tetagetgae egateatate gteccagatt actaeanate ataataattg 300
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323
atttcctqta naaaaaaaaa aaa
<210> 85
<211> 771
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 63, \overline{4}26, 471, 497, 521, 554, 583, 586, 606, 609, 615, 652,
686, 691, 694, 695, 706, 713, 730, 732, 743, 751
<223> n = A, T, C or G
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aanagtttgc teetggetge tttgatgtea gtgetgetae teeacetetg eggegaatea 120
gaagcaagca actttgactg ctgtcttgga tacacagacc gtattcttca tcctaaattt 180
attgtgggct tcacacggca gctggccaat gaaggctgtg acatcaatgc tatcatcttt 240
cacacaaaga aaaagttgtc tgtgtgcgca aatccaaaac agacttgggt gaaatatatt 300
gtgcgtctcc tcagtaaaaa agtcaagaac atgtaaaaac tgtggctttt ctggaatgga 360
attggacata gcccaaqaac aqaaaqaact tgctggggtt ggaggtttca cttgcacatc 420
atgganggtt tagtgcttat cttatttgtg cctcctggac ttgtccaatt natgaagtta 480
atcatattgc atcatanttt gctttgttta acatcacatt naaattaaac tgtattttat 540
gttatttata gctntaggtt ttctgtgttt aactttttat acnaantttc ctaaactatt 600
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gccacaagct ttttttaaaa aaccantaca nccnngttaa atggtnggtc ccnaatggtt 720
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<210> 86
<211> 628
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 162, 249, 266, 348, 407, 427, 488, 518, 545, 566, 569, 597,
598, 611, 617, 621, 624
<223> n = A, T, C or G
<400> 86
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attatettaa agetgaagee aaaatatget teaaaagaaa angaetttat tgtteattgt 180
agttcataca ttcaaagcat ctgaactgta gtttctatag caagccaatt acatccataa 240
gtggagaang aaatagatta atgtcnaagt atgattggtg gagggagcaa ggttgaagat 300
aatctggggt tgaaattttc tagttttcat tctgtacatt tttagttnga catcagattt 360
gaaatattaa tgtttacctt tcaatgtgtg gtatcagctg gactcantaa cacccctttc 420
ttccctnggg gatggggaat ggattattgg aaaatggaaa gaaaaaagta cttaaagcct 480
teetttenea gtttetgget eetaeeetae tgatttanee agaataagaa aacattttat 540
catchtctqc tttattccca ttaatnaant tttgatgaat aaatctgctt ttatgcnnac 600
                                                                    628
ccaaggaatt nagtggnttc ntcnttgt
<210> 87
<211> 518
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<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 384, 421, 486
<223> n = A, T, C or G
<400> 87
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tataacaaca ttatactgtt tatggtttaa tacatatggt tcaaaatgta taatacatca 120
agtagtacag ttttaaaatt ttatgcttaa aacaagtttt gtgtaaaaaa tgcagataca 180
ttttacatgg caaatcaatt tttaagtcat cctaaaaatt gattttttt tgaaatttaa 240
aaacacattt aatttcaatt tototottat ataacettta ttactatage atggtttoca 300
ctacagttta acaatgcagc aaaattccca tttcacggta aattgggttt taagcggcaa 360
ggttaaaatg ctttgaggat cctnaatacc ctttgaactt caaatgaagg ttatggttgt 420
naatttaacc ctcatgccat aagcagaagc acaagtttag ctgcattttg ctctaaactg 480
taaaancgag cccccgttg aaaaagcaaa agggaccc
                                                                 518
<210> 88
<211> 1844
<212> DNA
<213> Homo sapiens
<400> 88
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ttccatcttc ttggtgctgg gaagccatat atgtgtcttt tactcaagct aaggggtata 240
agettatgtg ttgaatttgc tacatctata tttcacatat tetcacaata agagaatttt 300
gaaatagaaa tatcatagaa catttaagaa agtttagtat aaataatatt ttgtgtgttt 360
taatcccttt gaagggatct atccaaagaa aatattttac actgagctcc ttcctacacg 420
totcagtaac agatectgtg ttagtetttg aaaatagete attttttaaa tgtcagtgag 480
tagatgtagc atacatatga tgtataatga cgtgtattat gttaacaatg tctgcagatt 540
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acataqqqca atctqtqaat atqtattata aqcaqcattc caqaaaaqta qttqgtqaaa 660
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ccttgctttt aaattaaacg ctacagccat ttaagccttg aggataataa agcttgagag 780
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gcaccetace teacetgett actgacattg tettagetga teacaagate attateagee 960
tocattatto ottactgtat ataaaataca gagttttata ttttcctttc ttcgtttttc 1020
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atttgaagtt caaaggtgta ttcaggatcc tcaaagcatt ttaaccttgc cgcttaaaac 1500
ccaatttacc gtgaaatggg aattttgctg cattgttaaa ctgtagtgga aaccatgcta 1560
tagtaataaa ggttatataa gagagaaatt gaaattaaat gtgtttttaa atttcaaaaa 1620
aaaatcaatc tttaggatga cttaaaaatt gatttgccat gtaaaatgta tctgcatttt 1680
ttacacaaaa cttqttttaa qcataaaatt ttaaaactqt actacttqat qtattataca 1740
```

```
THEOR AREA AREA CARRA ATTACA A
```

```
ttttgaacca tatgtattaa accataaaca gtataatgtt gttataataa aacaggcaat 1800
aaatttataa ataaaagctq aaaaaaaaaa aaaaaaaaaa aaaa
<210> 89
<211> 523
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 288, 352, 369, 398, 475, 511, 513
<223> n = A, T, C or G
<400> 89
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qqqataaaqa tqactqttaq tcactcacaq taaqqaaqaa aactaqcaaa taaqacqatt 120
acaatatgat gtagaaaatg ctaagccaga gatatagaaa ggtcctattg ggtccttctg 180
teacettgte tittecacate cetaceette acaggeette cetecagett cetgececeg 240
ctccccactg cagatcccct gggattttgc ctagagctaa acgagganat gggccccctg 300
gccctggcat gacttgaacc caaccacaga ctgggaaagg gagcctttcg anagtggatc 360
actttgatna gaaaacacat agggaattga agagaaantc cccaaatggc cacccgtgct 420
qqtqctcaaq aaaagtttgc agaatggata aatgaaggat caagggaatt aatanatgaa 480
                                                                   523
taattgaatg gtggctcaat aagaatgact ncnttgaatg acc
<210> 90
<211> 604
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 563
<223> n = A, T, C or G
<400> 90
ccagtgtggt ggaatgcaaa gattaccccg gaagctttcg agaagctggg attccctgca 60
gcaaaggaaa tagccaatat gtgtcgtttc tatgaaatga agccagaccg agatgtcaat 120
ctcacccacc aactaaatcc caaagtcaaa agcttcagcc agtttatctc agagaaccag 180
gggagcette aagggeatgt agaaaateag etgtteagat aggeetetge accaeaage 240
ctctttcctc tctgatcctt ttcctcttta cggcacaaca ttcatgtttg acagaacatg 300
ctggaatgca attgtttgca acaccgaagg atttcctgcg gtcgcctctt cagtaggaag 360
cactgcattg gtgataggac acggtaattt gattcacatt taacttgcta gttagtgata 420
aggggtggta cacctgtttg gtaaaatgag aagcctcgga aacttgggag cttctctcct 480
accactaatg gggaggcag attattactg ggatttctcc tggggtgaat taatttcaag 540
coctaattgc tgaaattccc ctnggcaggc tccagttttc tcaactgcat tgcaaaattc 600
                                                                   604
cccc
<210> 91
<211> 858
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> 570, 591, 655, 664, 667, 683, 711, 759, 760, 765, 777, 787,
792, 794, 801, 804, 809, 817, 820
<223> n = A, T, C or G
<400> 91
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tggcagagtt tctgatgctt aataaacatt tgttctgatc agataagtgg aaaaaattgt 120
cattteetta tteaageeat gettttetgt gatattetga teetagttga acatacagaa 180
ataaatgtct aaaacagcac ctcgattctc gtctataaca ggactaagtt cactgtgatc 240
ttaaataagc ttggctaaaa tgggacatga gtggaggtag tcacacttca gcgaagaaag 300
agaatctcct gtataatctc accaggagat tcaacgaatt ccaccacact ggactagtgg 360
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geoeggtace caattegeee tatagtgagt egtattacge gegeteactg geogtegttt 480
tacaacqtcq tqactqqqaa aaccctqqcq ttacccaact taatcqcctt qcaqcacatc 540
cccctttcgc cagctggcgt aatagcgaan agcccgcacc gatcgccctt ncaacagttg 600
cqcaqcctqa atqqcqaatq qqacqcqccc tqtaqcqqcq cattaaaqcq cqgcnqqqtq 660
tggnggntce cecaegtgae cgntacaett ggeagegeet taegeeggte nttegettte 720
ttcccttcct ttctcgcacc gttcgccggg tttccccgnn agctnttaat cgggggnctc 780
cctttanggg tncnaattaa nggnttacng gaccttngan cccaaaaact ttgattaggg 840
ggaaggtccc cgaagggg
<210> 92
<211> 585
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 317, 319, 320, 321, 325, 327, 328, 330, 331, 332, 460, 462,
483, 485, 487, 523, 538, 566, 584
<223> n = A, T, C or G
<400> 92
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tecaeteatg teceatttta gecaagetta tttaagatea eagtgaaett agteetgtta 120
tagacgagaa tcgaggtgct gttttagaca tttatttctg tatgttcaac taggatcaga 180
atatcacaga aaagcatggc ttgaataagg aaatgacaat tttttccact tatctgatca 240
gaacaaatgt ttattaagca tcagaaactc tgccaacact gaggatgtaa agatcaataa 300
aaaaaataat aatcatnann naaanannan nngaagggcg gccgccaccg cggtggagct 360
ccagcttttg ttccctttag tgagggttaa ttgcgcgctt ggcgttaatc atggtcatag 420
ctgtttcctg tgtgaaattg ttatccggct cacaattccn cncaacatac gagccgggaa 480
gentnangtg taaaageetg ggggtgeeta attgagtgag etnacteaca ttaattgngt 540
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                                                                   585
<210> 93
<211> 567
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 82, 158, 230, 232, 253, 266, 267, 268, 269, 270, 271, 272,
273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284,
285, 286, 287, 295, 303, 307, 314, 349, 352, 354, 356, 366,
```

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369, 379, 382, 386, 393, 404, 427, 428, 446, 450, 452
<223> n = A, T, C or G
<221> misc feature
<222> 453, 454, 459, 462, 480, 481, 483, 488, 493, 501, 509, 511,
512, 518, 520, 525, 526, 532, 541, 557
<223> n = A, T, C or G
<400> 93
cggcagtgtt gctgtctgcg tgtccacctt ggaatctggc tgaactggct gggaggacca 60
agactgcggc tggggtgggc anggaaggga accgggggct gctgtgaagg atcttggaac 120
ttccctgtac ccaccttccc cttgcttcat gtttgtanag gaaccttgtg ccggccaagc 180
ccagtttcct tgtgtgatac actaatgtat ttgctttttt tgggaaatan anaaaaatca 240
attaaattgc tantgtttct ttgaannnnn nnnnnnnnn nnnnnnnggg ggggncgccc 300
concedenge aacheecect titgticect tiaatiqaaa gettaating enenentege 360
gttaancent gggccaaane tngttneeeg tgntgaaatt gttnateeee teecaaatte 420
cccccnncc ttccaaaccc ggaaancctn annntgttna ancccggggg gttgcctaan 480
ngnaattnaa cenaaceee ntttaaatng nntttgenen ceaenngeee enettteeea 540
nttcggggaa aaccctntcc gtgccca
                                                                   567
<210> 94
<211> 620
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 169, 171, 222, 472, 528, 559, 599
<223> n = A, T, C or G
<400> 94
actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaana naatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
gttcttgtta tttccaaata qaatggactt ggtctgttaa gggctaagga gaagaggaag 300
ataaggttaa aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
tttcaageet tegaactatt taaggaaage aaaateattt eetaaatgea tateatttgt 420
gagaatttet cattaatate etgaateatt cattteacta aggeteatgt tnacteegat 480
atgtctctaa gaaagtacta tttcatggtc caaacctggt tgccatantt gggtaaaggc 540
tttcccttaa gtgtgaaant atttaaaatg aaattttcct ctttttaaaa attctttana 600
                                                                   620
agggttaagg gtgttgggga
<210> 95
<211> 470
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 61, 67, 79, 89, 106, 213, 271, 281, 330, 354, 387, 432, 448
<223> n = A, T, C or G
<400> 95
```

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ctcqaccttc tctqcacaqc qqatqaaccc tqaqcaqctq aaqaccaqaa aaqccactat 60
nactttntgc ttaattcang agcttacang attcttcaaa gagtgngtcc agcatccttt 120
gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc 180
agcaggtgaa acaacccatc cagcctccac ctnaggaaat atttgttccc acaaccaagg 240
agccatgcca ctcaaaggtt ccacaacctg naaacacaaa nattccagag ccaggctgta 300
ccaaggtccc tgagccaggg ctgtaccaan gtccctgagc caggttgtac caangtccct 360
gagocaggat gtaccaaggt cootgancca ggttgtccaa ggtccotgag coaggotaca 420
ccaagggcct gngccaggca gcatcaangt ccctgaccaa ggcttatcaa
<210> 96
<211> 660
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 299, 311, 360, 426, 538, 540, 542, 553, 563, 565, 592, 603,
604, 618, 633, 647, 649, 651, 653
<223> n = A, T, C or G
<400> 96
tttttttttt tttttttt ggaattaaaa gcaatttaat gagggcagag caggaaacat 60
gcatttettt teattegaat etteagatga accetgagea geegaagaee agaaaageea 120
tgaagacttt ctgcttaatt caggggctta caggattctt cagagtgtgt gtgaacaaaa 180
gctttatagt acgtattttt aggatacaaa taagagagag actatggctt ggggtgagaa 240
tgtactgatt acaaggteta cagacaatta agacacagaa acagatggga agagggtgnc 300
cagcatetgg nggttggett etcaaggget tgtetgtgea ecaaattaet tetgettggn 360
cttctqctqa qctqqqcctq qaqtqaccqt tqaaqqacat qqctctqqta cctttqtqta 420
gcctgncaca ggaactttgg tgtatccttg ctcaggaact ttgatggcac ctggctcagg 480
aaacttgatg aagcettggt caagggacct tgatgettge tggetcaggg accttggngn 540
ancetggget canggacett tgneneaace ttggetteaa gggaceettg gnacateetg 600
gennagggae cettgggnee aaccetggge ttnagggaee etttggntne nancettgge 660
<210> 97
<211> 441
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 12, 308
<223> n = A, T, C or G
<400> 97
gggaccatac anagtattcc tctcttcaca ccaggaccag ccactgttgc agcatgagtt 60
cccagcagca gaagcagccc tgcatcccac cccctcagct tcagcagcag caggtgaaac 120
agocttgoca geeteeacet caggaaceat geateeceaa aaceaaggag eeetgeeace 180
ccaaggtgcc tgagccctgc caccccaaag tgcctgagcc ctgccagccc aaggttccag 240
agecatgeca ecceaaggtg ectgageet geetteaat agteacteca geaceageee 300
agcagaanac caagcagaag taatgtggtc cacagccatg cccttgagga gccggccacc 360
agatgctgaa tcccctatcc cattctgtgt atgagtccca tttgccttgc aattagcatt 420
ctgtctcccc caaaaaaaaa a
                                                                   441
```

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<210> 98
<211> 600
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 295, 349, 489, 496, 583
<223> n = A, T, C or G
<400> 98
gtatteetet etteacacca ggaccageca etgttgeage atgagtteee ageageagaa 60
gcagccetge ateceaece eteagettea gcagcageag gtgaaacage ettgecagee 120
tocacctcag gaaccatgca tocccaaaac caaggagccc tgccacccca aggtgcctga 180
gccctgccac cccaaagtgc ctgagccctg ccagcccaag gttccagagc catgccaccc 240
gcagaagtaa tgtggtccac agccatgccc ttgaggagcc ggccaccana tgctgaatcc 360
cetateceat tetgtgtatg agteceattt geettgeaat tageattetg teteceecaa 420
aaaagaatgt getatgaage tttettteet acacactetg agtetetgaa tgaagetgaa 480
ggtcttaant acaganctag ttttcagctg ctcagaattc tctgaagaaa agatttaaga 540
tgaaaggcaa atgattcagc tccttattac cccattaaat tcnctttcaa ttccaaaaaa 600
<210> 99
<211> 667
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 345, 562, 635
<223> n = A, T, C or G
<400> 99
actagtgact gagtteetgg caaagaaatt tgacetggae cagttgataa etcatgtttt 60
accatttaaa aaaatcagtg aaggatttga gctgctcaat tcaggacaaa gcattcgaac 120
ggtcctgacg ttttgagatc caaagtggca ggaggtctgt gttgtcatgg tgaactggag 180
tttctcttgt gagagttccc tcatctgaaa tcatgtatct gtctcacaaa tacaagcata 240
agtagaagat ttgttgaaga catagaaccc ttataaagaa ttattaacct ttataaacat 300
ttaaagtctt gtgagcacct gggaattagt ataataacaa tgttnatatt tttgatttac 360
attttgtaag gctataattg tatcttttaa gaaaacatac cttggatttc tatgttgaaa 420
tggagatttt taagagtttt aaccagctgc tgcagatata ttactcaaaa cagatatagc 480
gtataaagat atagtaaatg catctcctag agtaatattc acttaacaca ttggaaacta 540
ttatttttta gatttgaata tnaatgttat tttttaaaca cttgttatga gttacttggg 600
attacatttt gaaatcagtt cattccatga tgcanattac tgggattaga ttaagaaaga 660
cggaaaa
                                                                667
<210> 100
<211> 583
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> 404, 506, 514, 527, 528, 538, 548, 556, 568, 569
<223> n = A, T, C or G
<400> 100
gttttgtttg taagatgatc acagtcatgt tacactgatc taaaggacat atatataacc 60
ctttaaaaaa aaaatcactg cctcattctt atttcaagat gaatttctat acagactaga 120
tgtttttctg aagatcaatt agacattttg aaaatgattt aaagtgtttt ccttaatgtt 180
ctctgaaaac aagtttcttt tgtagtttta accaaaaaag tgcccttttt gtcactggat 240
totoctagca ttoatgattt ttttttcata caatgaaatt aaaattgcta aaatcatgga 300
ctggctttct ggttggattt caggtaagat gtgtttaagg ccagagcttt tctcagtatt 360
tgattttttt ccccaatatt tgatttttta aaaatataca catnggtgct gcatttatat 420
ctgctqqttt aaaattctqt catatttcac ttctaqcctt ttaqttatqq caaatcatat 480
tttactttta cttaaagcat ttggtnattt ggantatctg gttctannct aaaaaaanta 540
                                                                   583
attctatnaa ttgaantttt ggtactcnnc catatttgga tcc
<210> 101
<211> 592
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 218, 497, 502, 533, 544, 546, 548, 550, 555
<223> n = A, T, C or G
<400> 101
gtggagacgt acaaagagca gccgctcaag acacctggga agaaaaagaa aggcaagccc 60
gggaaacgca aggagcagga aaagaaaaaa cggcgaactc gctctgcctg gttagactct 120
ggagtgactg ggagtgggct agaaggggac cacctgtctg acacctccac aacgtcgctg 180
gagetegatt caeggaggea ttgaaatttt cageaganae ettecaagga catattgeag 240
qattotqtaa taqtqaacat atqqaaaqta ttaqaaatat ttattqtotq taaatactqt 300
aaatgcattq gaataaaact gtctcccca ttgctctatg aaactgcaca ttggtcattg 360
tgaatatttt tttttttgcc aaggctaatc caattattat tatcacattt accataattt 420
attttgtcca ttgatgtatt tattttgtaa atgtatcttg gtgctgctga atttctatat 480
tttttgtaca taatgcnttt anatatacct atcaagtttg ttgataaatg acncaatgaa 540
gtgncncnan ttggnggttg aatttaatga atgcctaatt ttattatccc aa
<210> 102
<211> 587
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 91, 131, 256, 263, 332, 392, 400, 403, 461, 496, 497, 499,
510, 511, 518, 519, 539, 554, 560, 576
<223> n = A, T, C or G
<400> 102
egtectaage acttagacta catcagggaa gaacacagae cacatecetg teetcatgeg 60
gettatgttt tetggaagaa agtggagaee nagteettgg etttaggget eeceggetgg 120
gggctgtgca ntccggtcag ggcgggaagg gaaatgcacc gctgcatgtg aacttacagc 180
ccaggeggat geocettece ttageactae etggeetect geatececte geoteatgtt 240
cctcccacct tcaaanaatg aanaacccca tgggcccagc cccttgccct ggggaaccaa 300
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ggcagccttc caaaactcag gggctgaagc anactattag ggcaggggct gactttgggt 360
gacactgece attecetete agggeagete angteaecen ggnetettga acceageetg 420
ttcctttgaa aaaqqqcaaa actqaaaaqq qcttttccta naaaaaqaaa aaccagqgaa 480
ctttgccagg gcttcnntnt taccaaaacn ncttctcnng gatttttaat tccccattng 540
gcctccactt accngggcn atgccccaaa attaanaatt tcccatc
<210> 103
<211> 496
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 2, 17, 66, 74, 82, 119, 164, 166, 172, 200, 203, 228, 232,
271, 273, 415, 423, 445, 446, 473
<223> n = A, T, C or G
<400> 103
anaggactgg coctaentge tetetetegt cetaectate aatgeceaae atggeagaac 60
ctgcanccct tggncactgc anatggaaac ctctcagtgt cttgacatca ccctacccnt 120
qcqqtqqqtc tccaccacaa ccactttqac tctqtqqtcc ctqnangqtq qnttctcctq 180
actggcagga tggaccttan ccnacatatc cctctgttcc ctctgctnag anaaagaatt 240
cccttaacat gatataatcc acccatgcaa ntngctactg gcccagctac catttaccat 300
ttgcctacag aatttcattc agtctacact ttggcattct ctctggcgat agagtgtggc 360
tgggctgacc gcaaaaggtg ccttacacac tggcccccac cctcaaccgt tgacncatca 420
gangettgee teeteettet gattnneece eatgttggat ateagggtge tenagggatt 480
                                                                   496
ggaaaagaaa caaaac
<210> 104
<211> 575
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 18, 19, 45, 68, 77, 132, 155, 174, 219, 226, 238, 259, 263,
271, 273, 306, 323, 339, 363, 368, 370, 378, 381, 382, 436,
440, 449, 450, 456, 481, 485, 496, 503, 510, 512, 515, 528,
542, 552
<223> n = A, T, C or G
<400> 104
gcacctgctc tcaatconnc tctcaccatg atcctccgcc tgcanaaact cctctgccaa 60
ctatggangt ggtttenggg gtggetettg ceaactggga agaageegtg gtgtetetae 120
ctgttcaact cngtttgtgt ctgggggatc aactnggggc tatggaagcg gctnaactgt 180
tgttttggtg gaagggctgg taattggctt tgggaagtng cttatngaag ttggcctngg 240
gaagttgcta ttgaaagtng ccntggaagt ngntttggtg gggggttttg ctggtggcct 300
ttgttnaatt tgggtgcttt gtnaatggcg gccccctcnc ctgggcaatg aaaaaaatca 360
conatgongn aaacctonac nnaacagoot gggottooot cacotogaaa aaagttgoto 420
ccccccaaa aaaggncaan cccctcaann tggaangttg aaaaaatcct cgaatgggga 480
ncccnaaaac aaaaancccc contttcccn gnaanggggg aaataccncc cccccactta 540
                                                                   575
cnaaaaccct tntaaaaaac ccccgggaa aaaaa
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<211> 619
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 260, 527, 560, 564, 566, 585, 599
<223> n = A, T, C or G
<400> 105
cactagtagg atagaaacac tgtgtcccga gagtaaggag agaagctact attgattaga 60
qcctaaccca qqttaactqc aaqaaqaqqc qqqatacttt caqctttcca tqtaactqta 120
tgcataaaqc caatgtagtc cagtttctaa gatcatgttc caagctaact gaatcccact 180
tcaatacaca ctcatgaact cctgatggaa caataacagg cccaagcctg tggtatgatg 240
tgcacacttg ctagactcan aaaaaatact actctcataa atgggtggga gtattttggt 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatattcat ttattccatg 360
qacatttaqt taqtqctttt tatataccaq qcatqatqct qaqtqacact cttqtqtata 420
tttccaaatt tttqtacaqt cqctqcacat atttqaaatc atatattaag acttccaaaa 480
aatgaagtee etggttttte atggeaactt gateagtaaa ggatteneet etgtttggta 540
cttaaaacat ctactatatn gttnanatga aatteetttt cecencetee egaaaaaana 600
                                                                   619
aagtggtggg gaaaaaaaa
<210> 106
<211> 506
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 8, 21, 31, 32, 58, 75, 89, 96, 99, 103, 122, 126, 147, 150,
158, 195, 210, 212, 219, 226, 246, 248, 249, 255, 258, 261,
263, 265, 275, 304, 317, 321, 331, 337, 340, 358, 371, 377,
380, 396, 450, 491
<223> n = A, T, C or G
<400> 106
cattggtnet tteatttget ntggaagtgt nnatetetaa eagtggaeaa agtteeengt 60
gccttaaact ctgtnacact tttgggaant gaaaanttng tantatgata ggttattctg 120
angtanagat gttctggata ccattanatn tgcccccngt gtcagaggct catattgtgt 180
tatgtaaatg gtatntcatt cgctactatn antcaattng aaatanggtc tttgggttat 240
gaatantnng cagchcanct nanangetgt etgtngtatt cattgtggte atagcacete 300
acancattgt aacctenate nagtgagaca nactagnaan tteetagtga tggeteanga 360
ttccaaatgg nctcatntcn aatgtttaaa agttanttaa gtgtaagaaa tacagactgg 420
atgttccacc aactagtacc tgtaatgacn ggcctgtccc aacacatctc ccttttccat 480
                                                                   506
gactgtggta necegeateg gaaaaa
<210> 107
<211> 452
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 289, 317, 378
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<223> n = A, T, C or G
<400> 107
gttgagtctg tactaaacag taagatatct caatgaacca taaattcaac tttgtaaaaa 60
tcttttgaag catagataat attgtttggt aaatgtttct tttgtttggt aaatgtttct 120
tttaaagacc ctcctattct ataaaactct gcatgtagag gcttgtttac ctttctctct 180
ctaaggttta caataggagt ggtgatttga aaaatataaa attatgagat tggttttcct 240
gtggcataaa ttgcatcact gtatcatttt cttttttaac cggtaagant ttcagtttgt 300
tggaaagtaa ctgtganaac ccagtttccc gtccatctcc cttagggact acccatagaa 360
catgaaaagg tccccacnga agcaagaaga taagtctttc atggctgctg gttgcttaaa 420
ccactttaaa accaaaaaat tccccttgga aa
                                                                   452
<210> 108
<211> 502
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 22, 31, 126, 168, 183, 205, 219, 231, 236, 259, 283, 295,
296, 298, 301, 340, 354, 378, 383, 409, 433, 446, 455, 466,
<223> n = A, T, C or G
<400> 108
atcttcttcc cttaattagt tnttatttat ntattaaatt ttattgcatg tcctggcaaa 60
caaaaagaga ttgtagattg gcttctggct ccccaaaagc ccataacaga aagtaccaca 120
agaccncaac tgaagcttaa aaaatctatc acatgtataa tacctttnga agaacattaa 180
tanagcatat aaaactttta acatntgctt aatgttgtnc aattataaaa ntaatngaaa 240
aaaatqtccc tttaacatnc aatatcccac ataqtqttat ttnaqqqqat taccnnqnaa 300
naaaaaaaqq qtaqaaqqqa tttaatqaaa actctqcttn ccatttctqt ttanaaacqt 360
ctccagaaca aaaacttntc aantctttca gctaacegca tttgagctna ggccactcaa 420
aaactccatt agncccactt tctaanggte tctanagctt actaancctt ttgaccctt 480
                                                                   502
accetggnta etcetgecet ca
<210> 109
<211> 1308
<212> DNA
<213> Homo sapiens
<400> 109
accogaggte tegetaaaat cateatggat teacttggeg eegteageae tegacttggg 60
tttgatcttt tcaaagagct gaagaaaaca aatgatggca acatcttctt ttcccctgtg 120
ggcatcttqa ctgcaattqq catgqtcctc ctqqqqaccc qaqqaqccac cqcttcccag 180
ttggaggagg tgtttcactc tgaaaaagag acgaagagct caagaataaa ggctgaagaa 240
aaagaggtga ttgagaacac agaagcagta catcaacaat tccaaaagtt tttgactgaa 300
ataagcaaac tcactaatga ttatgaactg aacataacca acaggctgtt tggagaaaaa 360
acatacetet teetteaaaa ataettagat tatgttgaaa aatattatea tgeatetetg 420
gaacctgttg attttgtaaa tgcagccgat gaaagtcgaa agaagattaa ttcctgggtt 480
gaaagcaaaa caaatgaaaa aatcaaggac ttgttcccag atggctctat tagtagctct 540
accaagetgg tgetggtgaa catggtttat tttaaaggge aatgggacag ggagtttaag 600
aaagaaaata ctaaggaaga gaaattttgg atgaataaga gcacaagtaa atctgtacag 660
atgatgacac agagecatte etttagette aettteetgg aggaettgea ggecaaaatt 720
ctagggatte catataaaaa caacgaccta agcatgtttg tgcttctgcc caacgacate 780
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290

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gatggcctgg agaagataat agataaaata agtcctgaga aattggtaga gtggactagt 840
ccagggcata tggaagaaag aaaggtgaat ctgcacttgc cccggtttga ggtggaggac 900
agttacgate tagaggeggt cetggetgee atggggatgg gegatgeett cagtgageae 960
aaagccgact actcgggaat gtcgtcaggc tccgggttgt acgcccagaa gttcctgcac 1020
agttcctttg tggcagtaac tgaggaaggc accgaggctg cagctgccac tggcataggc 1080
tttactgtca catcegeece aggteatgaa aatgtteaet geaateatee etteetgtte 1140
ttcatcaggc acaatgaatc caacagcatc ctcttcttcg gcagattttc ttctccttaa 1200
gatgategtt gecatggeat tgetgetttt ageaaaaaac aactaceagt gttacteata 1260
tgattatgaa aatcgtccat tcttttaaat ggtggctcac ttgcattt
<210> 110
<211> 391
<212> PRT
<213> Homo sapiens
<400> 110
Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe
                                    10
Lys Glu Leu Lys Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val
            20
                                25
                                                     30
Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala
                            40
Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys
                        55
                                             60
Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Ile Glu Asn Thr Glu
                    70
                                         75
Ala Val His Gln Gln Phe Gln Lys Phe Leu Thr Glu Ile Ser Lys Leu
                8.5
                                    90
Thr Asn Asp Tyr Glu Leu Asn Ile Thr Asn Arg Leu Phe Gly Glu Lys
            100
                                105
Thr Tyr Leu Phe Leu Gln Lys Tyr Leu Asp Tyr Val Glu Lys Tyr Tyr
        115
                            120
                                                 125
His Ala Ser Leu Glu Pro Val Asp Phe Val Asn Ala Ala Asp Glu Ser
                        135
                                             140
Arg Lys Lys Ile Asn Ser Trp Val Glu Ser Lys Thr Asn Glu Lys Ile
                    150
                                        155
Lys Asp Leu Phe Pro Asp Gly Ser Ile Ser Ser Ser Thr Lys Leu Val
                                     170
Leu Val Asn Met Val Tyr Phe Lys Gly Gln Trp Asp Arg Glu Phe Lys
                                 185
                                                     190
Lys Glu Asn Thr Lys Glu Glu Lys Phe Trp Met Asn Lys Ser Thr Ser
                            200
                                                 205
Lys Ser Val Gln Met Met Thr Gln Ser His Ser Phe Ser Phe Thr Phe
    210
                        215
                                             220
Leu Glu Asp Leu Gln Ala Lys Ile Leu Gly Ile Pro Tyr Lys Asn Asn
                    230
                                         235
Asp Leu Ser Met Phe Val Leu Leu Pro Asn Asp Ile Asp Gly Leu Glu
                245
                                     250
                                                         255
Lys Ile Ile Asp Lys Ile Ser Pro Glu Lys Leu Val Glu Trp Thr Ser
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ctccagccgt gtctttatgt caagcagcat cttgtactcc tggttctgag cctccatctc 300
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<213> Homo sapiens
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agccttggaa aggtcactga aaaatcttca attggattat gttgacctct accttattca 180
ttttccagtg tctgtaaagc caggtgagga agtgatccca aaagatgaaa atggaaaaat 240
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<212> DNA
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aatagaggta tttttaggct atttttgtaa tatggcttct ggtcaaaatc cctgtgtagc 240
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<213> Homo sapiens
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<212> DNA
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gaaaccatgc cccagagaag gttaagtgac ttcctcttta tggagccagt gttccaacct 300
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<210> 148
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agggagtgtg ccgagggctt ctgagaaggt ttctctcaca tctagaaaga agcgcttaag 180
atgtggcagc coctettett caagtggete ttgtcetgtt gecetgggag ttetcaaatt 240
getgeageag cetecateca geetgaggat gacateaata cacagaggaa gaagagteag 300
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<213> Homo sapiens
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gccaatattt cettatatet atccataaca tttatactac atttgtaana naatatgcac 180
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            20
                                25
                                                     30
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
                            40
                                                 45
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
                        55
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
                    70
                                         75
                                                             80
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
                                     90
                85
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
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Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
                                                 125
                            120
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
                        135
                                             140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
                    150
                                         155
Glu Gly Gln Ile Ala Pro Ser Ser His Leu Ile Arg Val Glu Gly Asn
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Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
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180

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Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
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Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
225 230
                  235
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
           245 250
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
                        265
         260
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
                     280
      275
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
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Glu Leu Val Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
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              310
Val Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Leu Gln His
           325 330
Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
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Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser
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Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val
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Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met
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Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro
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Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro
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Tyr Pro Thr Asp Cys Ser Ile Val Ser Phe Leu Ala Arg Leu Gly Cys
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Ser Ser Cys Leu Asp Tyr Phe Thr Thr Gln Gly Leu Thr Thr Ile Tyr
465 470 475 480
Gln Ile Glu His Tyr Ser Met Asp Asp Leu Ala Ser Leu Lys Ile Pro
           485
               490
Glu Gln Phe Arg His Ala Ile Trp Lys Gly Ile Leu Asp His Arg Gln
         500
                        505 510
Leu His Glu Phe Ser Ser Pro Ser His Leu Leu Arg Thr Pro Ser Ser
                                    525
      515 520
Ala Ser Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val
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Ile Asp Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro
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Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
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Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
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Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
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Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
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Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Thr Ile
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Cys Ala Ile Asp Asp Gln Lys Thr Val Glu Glu Gly Phe Met Glu Asp
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Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
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Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
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Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
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Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
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100

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Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
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Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
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Leu Val Asp Cys Phe Ile Ser Arg Pro Thr Glu Lys Thr Val Phe Thr
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Ile Phe Met Ile Ser Ala Ser Val Ile Cys Met Leu Leu Asn Val Ala
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Glu Leu Cys Tyr Leu Leu Lys Val Cys Phe Arg Arg Ser Lys Arg
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Ala Gln Thr Gln Lys Asn His Pro Asn His Ala Leu Lys Glu Ser Lys
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Gln Asn Glu Met Asn Glu Leu Ile Ser Asp Ser Gly Gln Asn Ala Ile
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Thr Gly Ser Gln Ala Lys His Phe Lys Val Lys Cys Ser Cys Val Ile
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<212> PRT
<213> Homo sapiens
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Ile	Ile 770	Asp	Leu	Glu	Ala	Val 775	Lys	Val	Glu	Glu	Glu 780	Leu	Thr	Leu	Ser
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Ile	Arg	Glu 835	Ile	Phe	Thr	Phe	Ser 840	Pro	Gln	Ile	Ser	Thr 845	Asn	Gly	Pro
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Lys Ser Ile Gln Asp Leu Arg Arg Phe Phe Leu His His Leu Ile
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			Asn 580					585					590		
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360

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Cys Gly Pro Gln Met Leu Val Phe Leu Arg Val Ile Gly Gly Leu Leu
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Ala Leu Ala Ala Val Phe Gln Ile Ile Ser Leu Val Ile Tyr Pro Val
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Lys Tyr Thr Gln Thr Phe Thr Leu His Ala Asn Pro Ala Val Thr Tyr
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Ile Tyr Asn Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr Ile Ile Leu
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                                               205
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gcagccaaag acctaactca gtcccctgag gtctccccaa caaccatcca ggtgacatac 240
gataactata acacattgga gagtactctg tgacggagct gaaggactct tgccgtagat 360
taagccagtc agttgcaatg tgcaagacag gctgcttgcc gggccqccct cggaacatct 420
ggcccagcag gcccagactg tatccatcca agttcccgtt gtatccagag ttcttagage 480
```

```
ttqtqtctaa aggqtaattc cccaaccctt ccttatgagc atttttagaa cattggctaa 540
gactattttc ccccagtagc g
<210> 179
<211> 521
<212> DNA
<213> Homo sapiens
<400> 179
cccaacgcgt ttgcaaatat tcccctggta gcctacttcc ttacccccga atattggtaa 60
gategageaa tggetteagg acatgggtte tetteteetg tgateattea agtgeteaet 120
qcatqaaqac tqqcttqtct caqtqtttca acctcaccag ggctgtctct tggtccacac 180
ctcqctccct qttaqtqccq tatqacaqcc cccatcaaat gaccttggcc aagtcacggt 240
ttctctqtqq tcaaqqttqq ttqqctqatt qqtqqaaaqt aqqqtqqacc aaagqaqqcc 300
acqtqaqcaq tcaqcaccaq ttctqcacca gcaqcqcctc cgtcctagtq qqtqttcctg 360
tttctcctgg ccctgggtgg gctagggcct gattcgggaa gatgcctttg cagggagggg 420
aggataagtg ggatctacca attgattctg gcaaaacaat ttctaagatt tttttgcttt 480
                                                                521
atgtgggaaa cagatctaaa tctcatttta tgctgtattt t
<210> 180
<211> 417
<212> DNA
<213> Homo sapiens
<400> 180
ggtggaattc gccgaagatg gcggaggtgc aggtcctggt gcttgatggt cgaggccatc 60
tectgggeeg cetggeggee ategtggeta aacaggtaet getgggeegg aaggtggtgg 120
tcgtacgctg tgaaggcatc aacatttctg gcaatttcta cagaaacaag ttgaagtacc 180
tggctttcct ccgcaagcgg atgaacacca accettcccg aggcccctac cacttccggg 240
ccccagccg catcttctgg cggaccgtgc gaggtatgct qccccacaaa accaagcgaq 300
qccaqqccqc tctqqaccqt ctcaaqqtqt ttqacqqcat cccaccqccc tacqacaaqa 360
aaaagcggat ggtggttcct gctgccctca aggtcgtgcg tctgaagcct acaagaa
<210> 181
<211> 283
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 35
<223> n = A, T, C or G
<400> 181
gatttettet aaataggatg taaaaettet tteanattae tetteeteag teetgeetge 60
caagaactca agtgtaactg tgataaaata acctttccca ggtatattgg caggtatgtg 120
atttacattq tttacacttc tatqaccaqq ccttaaqqqa aqqtcaqttt tttaaaaaaac 240
caagtagtgt cttcctacct atctccagat acatgtcaaa aaa
                                                                 283
<210> 182
<211> 401
<212> DNA
<213> Homo sapiens
```

```
<400> 182
atattcttgc tgcttatgca gctgacattg ttgccctccc taaagcaacc aagtagcctt 60
tatttcccac agtgaaagaa aacgctggcc tatcagttac attacaaaag gcagatttca 120
agaggattga gtaagtagtt ggatggcttt cataaaaaca agaattcaag aagaggattc 180
atgctttaag aaacatttgt tatacattcc tcacaaatta tacctgggat aaaaactatg 240
tagcaggcag tgtgttttcc ttccatgtct ctctgcacta cctgcagtgt gtcctctgag 300
getgeaagte tgteetatet gaatteeeag eagaageaet aagaagetee accetateae 360
ctagcagata aaactatggg gaaaacttaa atctgtgcat a
                                                                   401
<210> 183
<211> 366
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 325
<223> n = A, T, C or G
<400> 183
accgtgtcca agtttttaga acccttgtta gccagaccga ggtgtcctgg tcaccgtttc 60
accatcatgc tttgatgttc ccctgtcttt ctctcttctg ctctcaagag caaaggttaa 120
tttaaggaca aagatgaagt cactgtaaac taatctgtca ttgtttttac cttccttttc 180
tttttcagtg cagaaattaa aagtaagtat aaagcaccgt gattgggagt gtttttgcgt 240
gtgtcggaat cactggtaaa tgttggctga gaacaatccc tccccttgca cttgtgaaaa 300
cactttgagc gctttaagag attancctga gaaataatta aatatctttt ctcttcaaaa 360
aaaaaa
                                                                   366
<210> 184
<211> 370
<212> DNA
<213> Homo sapiens
<400> 184
tcttacttca aaagaaaaat aaacataaaa aataagttgc tggttcctaa caggaaaaat 60
tttaataatt gtactgagag aaactgctta cgtacacatt gcagatcaaa tatttggagt 120
taaaatgtta gtctacatag atgggtgatt gtaactttat tgccattaaa agatttcaaa 180
ttgcattcat gcttctgtgt acacataatg aaaaatgggc aaataatgaa gatctctcct 240
tcagtctgct ctgtttaatt ctgctgtctg ctcttctcta atgctgcgtc cctaattgta 300
cacagtttag tgatatctag gagtataaag ttgtcgccca tcaataaaaa tcacaaagtt 360
ggtttaaaaa
                                                                   370
<210> 185
<211> 107
<212> DNA
<213> Homo sapiens
<400> 185
ctcatattat tttccttttg agaaattgga aactctttct gttgctatta tattaataaa 60
gttggtgttt attttctggt agtcaccttc cccatttaaa aaaaaaa
                                                                   107
<210> 186
<211> 309
```

```
Hinto come control notice after control in control of the control
```

```
<212> DNA
<213> Homo sapiens
<400> 186
gaaaggatgg ctctggttgc cacagagctg ggacttcatg ttcttctaga gagggccaca 60
agagggccac aggggtggcc gggagttgtc agctgatgcc tgctgagagg caggaattgt 120
gccagtgagt gacagtcatg agggagtgtc tcttcttggg gaggaaagaa ggtagagcct 180
ttctgtctga atgaaaggcc aaggctacag tacagggccc cgccccagcc agggtgttaa 240
tgcccacgta gtggaggcct ctggcagatc ctgcattcca aggtcactgg actgtacqtt 300
tttatggtt
                                                                   309
<210> 187
<211> 477
<212> DNA
<213> Homo sapiens
<400> 187
ttcagtccta gcaagaagcg agaattctga gatcctccag aaagtcgagc agcacccacc 60
tocaaceteg ggccagtgte tteaggettt actggggace tgegagetgg ectaatgtgg 120
tggcctgcaa gccaggccat ccctgggcgc cacagacgag ctccgagcca ggtcaggctt 180
eggaggeeae aageteagee teaggeeeag geactgattg tggeagaggg geeactaeee 240
aaggtctagc taggcccaag acctagttac ccagacagtg agaagcccct ggaaggcaga 300
aaagttggga gcatggcaga cagggaaggg aaacattttc agggaaaaga catgtatcac 360
atgtetteag aageaagtea ggttteatgt aacegagtgt cetettgegt gteeaaaagt 420
agcccagggc tgtagcacag gcttcacagt gattttgtgt tcagccgtga gtcacac
<210> 188
<211> 220
<212> DNA
<213> Homo sapiens
<400> 188
taaatatggt agatattaat attoototta gatgaccagt gattocaatt gtoocaagtt 60
ttaaataagt accetgtgag tatgagataa attagtgaca atcagaacaa gtttcagtat 120
cagatgttca agaggaagtt gctattgcat tgattttaat atttgtacat aaacactgat 180
ttttttgagc attattttgt atttgttgta ctttaatacc
                                                                   220
<210> 189
<211> 417
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 76, 77
<223> n = A, T, C or G
<400> 189
accatcttga cagaggatac atgctcccaa aacgtttgtt accacactta aaaatcactq 60
ccatcattaa gcatcnnttt caaaattata gccattcatg atttactttt tccaqatgac 120
tatcattatt ctagtccttt gaatttgtaa ggggaaaaaa aacaaaaaca aaaacttacg 180
atgcactttt ctccagcaca tcagatttca aattgaaaat taaagacatg ctatggtaat 240
gcacttgcta gtactacaca ctttgtacaa caaaaaacag aggcaagaaa caacggaaag 300
agaaaageet teetttgttg geeettaaae tgagteaaga tetgaaatgt agagatgate 360
```

```
tctgacgata cctgtatgtt cttattgtgt aaataaaatt qctgqtatga aatgaca
                                                                   417
<210> 190
<211> 497
<212> DNA
<213> Homo sapiens
<400> 190
geactgegge getetecegt eeegeggtgg ttgetgetge tgeegetget getgggeetg 60
aacgcaggag ctgtcattga ctggcccaca gaggagggca aggaagtatg ggattatgtg 120
acggtccgca aggatgccta catgttctgg tggctctatt atgccaccaa ctcctgcaag 180
aactteteag aactgeeest ggteatgtgg etteagggeg gteeaggegg ttetageaet 240
ggatttggaa actttgagga aattgggccc cttgacagtg atctcaaacc acggaaaacc 300
acctggetee aggetgeeag teteetattt gtggataate eegtgggeae tgggtteagt 360
tatgtgaatg gtagtggtgc ctatgccaag gacctggcta tggtggcttc agacatgatg 420
gttctcctga agaccttctt cagttgccac aaagaattcc agacagttcc attctacatt 480
ttctcagagt cctatgg
                                                                   497
<210> 191
<211> 175
<212> DNA
<213> Homo sapiens
<400> 191
atgttgaata ttttgcttat taactttgtt tattgtcttc tccctcgatt agaatattag 60
ctacttgagt acaaggattt gagcctgtta cattcactgc tgaattttag gctcctggaa 120
gatacccagc attcaataga gaccacacaa taaatatatg tcaaataaaa aaaaa
<210> 192
<211> 526
<212> DNA
<213> Homo sapiens
<400> 192
agtaaacatt attattttt ttatatttgc aaaggaaaca tatctaatcc ttcctataga 60
aagaacagta ttgctgtaat teettttett ttetteetea ttteetetge eeettaaaaq 120
attgaagaaa gagaaacttg tcaactcata tccacqttat ctaqcaaaqt acataagaat 180
ctatcactaa gtaatgtatc cttcagaatg tgttggttta ccagtgacac cccatattca 240
tcacaaaatt aaagcaagaa gtccatagta atttatttgc taatagtgga tttttaatgc 300
tcagagtttc tgaggtcaaa ttttatcttt tcacttacaa gctctatgat cttaaataat 360
ttacttaatg tattttggtg tattttcctc aaattaatat tggtgttcaa gactatatct 420
aattoototg atoactitga gaaacaaact titattaaat gtaaggcact titotatgaa 480
ttttaaatat aaaaataaat attgttctga ttattactga aaaaaa
                                                                   526
<210> 193
<211> 553
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 290, 300, 411, 441
<223> n = A, T, C or G
```

```
<400> 193
tecattgtgg tggaattege tetetggtaa aggegtgeag gtgttggeeg eggeetetga 60
gctgggatga gccgtgctcc cqqtqqaaqc aaqqqaqccc aqccqqaqcc atqqccaqta 120
cagtggtagc agttggactg accattgctg ctgcaggatt tqcaggccqt tacgttttqc 180
aagccatgaa gcatatggag cctcaagtaa aacaagtttt tcaaagccta ccaaaatctg 240
cetteagtgg tggctattat agaggtgggt ttgaacccaa aatgacaaan egggaagcan 300
cattaatact aggtgtaagc cctactgcca ataaagggaa aataagagat gctcatcgac 360
gaattatgct tttaaatcat cctgacaaag gaggatctcc ttatatagca nccaaaatca 420
atgaagctaa agatttacta naaggtcaag ctaaaaaatg aagtaaatgt atgatgaatt 480
ttaagttcgt attagtttat gtatatgagt actaagtttt tataataaaa tgcctcagag 540
ctacaatttt aaa
                                                                    553
<210> 194
<211> 320
<212> DNA
<213> Homo sapiens
<400> 194
cccttcccaa tccatcagta aagaccccat ctgccttgtc catgccgttt cccaacaggg 60
atgtcacttg atatgagaat ctcaaatctc aatgccttat aagcattcct tcctgtgtcc 120
attaagactc tgataattgt ctcccctcca taggaatttc tcccaggaaa gaaatatatc 180
cccatctccg tttcatatca gaactaccgt ccccgatatt cccttcaqaq aqattaaaqa 240
ccagaaaaaa gtgagcctct tcatctgcac ctgtaatagt ttcagttcct attttcttcc 300
attgacccat atttatacct
                                                                    320
<210> 195
<211> 320
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 203, 218
<223> n = A, T, C or G
<400> 195
aagcatgacc tggggaaatg gtcagacctt gtattgtgtt tttggccttg aaagtagcaa 60
gtgaccagaa tctgccatgg caacaggctt taaaaaaagac ccttaaaaaag acactgtctc 120
aactgtggtg ttagcaccag ccagctctct gtacatttgc tagcttgtag ttttctaaga 180
ctgagtaaac ttcttatttt tanaaagggg aggctggntt gtaactttcc ttgtacttaa 240
ttgggtaaaa gtcttttcca caaaccacca tctattttgt gaactttgtt agtcatcttt 300
tatttggtaa attatgaact
                                                                    320
<210> 196
<211> 357
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 36
\langle 223 \rangle n = A,T,C or G
<400> 196
```

```
The first state early early first set where it is not a sum one time. If a first state state is not a sum on the state of the state of
```

```
atataaaata atacqaaact ttaaaaagca ttgqantqtc agtatqttqa atcagtagtt 60
tcactttaac tgtaaacaat ttcttaggac accatttggg ctagtttctg tgtaagtgta 120
aatactacaa aaacttattt atactgttct tatgtcattt gttatattca tagatttata 180
tgatgatatg acatetgget aaaaagaaat tattgcaaaa ctaaccacta tgtacttttt 240
tataaatact gtatggacaa aaaatggcat titttatatt aaattgttta gctctggcaa 300
aaaaaaaaa ttttaagagc tggtactaat aaaggattat tatgactgtt aaaaaaa
<210> 197
<211> 565
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 27
<223> n = A, T, C or G
<400> 197
tcagctgagt accatcagga tatttanccc tttaagtgct gttttgggag tagaaaacta 60
aagcaacaat actteetett gacagetttg attggaatgg ggttattaga teatteacet 120
tggtcctaca ctttttagga tgcttggtga acataacacc acttataatg aacatccctg 180
gttcctatat tttgggctat gtgggtagga attgttactt gttactgcag cagcagccct 240
agaaagtaag cccagggctt cagatctaag ttagtccaaa agctaaatga tttaaagtca 300
agttgtaatg ctaggcataa gcactctata atacattaaa ttataggccg agcaattagg 360
gaatgtttct gaaacattaa acttgtattt atgtcactaa aattctaaca caaacttaaa 420
aaatgtgtct catacatatg ctgtactagg cttcatcatg catttctaaa tttgtgtatg 480
atttgaatat atgaaagaat ttatacaaga gtgttattta aaattattaa aaataaatgt 540
                                                                565
atataatttg tacctattgt aaaaa
<210> 198
<211> 484
<212> DNA
<213> Homo sapiens
<400> 198
tatgtaagta ttggtgtctg ctttaaaaaa ggagacccag acttcacctg tcctttttaa 60
acatttgaga acagtgttac tetgageagt tgggeeacet teacettate egacagetga 120
tgggcgcagc agcaggtggc aggggtgtgg cttgaggtgg gtggcagcgt ctggtcctcc 240
tetetggtge tttetgagag ggtetetaaa geagagtgtg gttggeetgg gggaaggeag 300
ageaegtatt teteceetet agtacetetg catttgtgag tgttecetet ggetttetga 360
agggcagcag actcttgagt atactgcaga ggacatgctt tatcagtagg tcctgagggc 420
tccaggggct caactgacca agtaacacag aagttggggt atgtggccta tttgggtcgg 480
aaac
                                                                 484
<210> 199
<211> 429
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 77, 88, 134, 151, 189, 227, 274, 319
<223> n = A, T, C or G
```

```
<400> 199
gcttatgttt tttgttttaa cttttgtttt ttaacattta gaatattaca ttttgtatta 60
tacagtacct ttctcanaca ttttgtanaa ttcatttcgg cagctcacta ggattttgct 120
gaacattaaa aagngtgata gcgatattag ngccaatcaa atggaaaaaa ggtagtctta 180
ataaacaana cacaacgttt ttatacaaca tactttaaaa tattaanaaa actccttaat 240
attqtttcct attaaqtatt attctttggg caanattttc tgatgctttt gattttctct 300
caatttagca tttgctttng gttttttct ctatttagca ttctgttaag gcacaaaaac 360
tatgtactgt atgggaaatg ttgtaaatat taccttttcc acattttaaa cagacaactt 420
                                                                  429
tgaatccaa
<210> 200
<211> 279
<212> DNA
<213> Homo sapiens
<400> 200
gcttttttga ggaattacag ggaagctcct ggaattgtac atggatatct ttatccctag 60
ggggaaatca aggagctggg cacccctaat tetttatgga agtgtttaaa actattttaa 120
ttttattaca agtattacta gagtagtggt tctactctaa gatttcaaaa gtgcatttaa 180
aatcatacat gttcccgcct gcaaatatat tgttattttg gtggagaaaa aaatagtata 240
ttctacataa aaaattaaag atattaacta agaaaaaaa
                                                                  279
<210> 201
<211> 569
<212> DNA
<213> Homo sapiens
<400> 201
taggtcagta tttttagaaa ctcttaatag ctcatactct tgataccaaa agcagccctg 60
attgttaaag cacacactg cacaagaagc agtgatggtt gcatttacat ttcctgggtg 120
cacaaaaaaa aatteteaaa aageaaggae ttaegetttt tgeaaageet ttgagaagtt 180
actggatcat aggaagctta taacaagaat ggaagattct taaataactc actttctttg 240
gtatccagta acagtagatg ttcaaaatat gtagctgatt aataccagca ttgtgaacgc 300
tgtacaacct tgtggttatt actaagcaag ttactactag cttctgaaaa gtagcttcat 360
aattaatgtt atttatacac tgccttccat qacttttact ttgccctaag ctaatctcca 420
aaatetqaaa tqctactcca atateaqaaa aaaaqqqqqa qqtqqaatta tattteetqt 480
gattttaaga gtacagagaa tcatgcacat ctctgattag ttcatatatg tctagtgtgt 540
aataaaagtc aaagatgaac tctcaaaaa
                                                                   569
<210> 202
<211> 501
<212> DNA
<213> Homo sapiens
<400> 202
attaatagge ttaataattg ttggcaagga teettttget ttetttggca tgeaagetee 60
tagcatctgg cagtggggcc aagaaaataa ggtttatgca tgtatgatgg ttttcttctt 120
gagcaacatg attgagaacc agtgtatgtc aacaggtgca tttgagataa ctttaaatga 180
tgtacctgtg tggtctaagc tggaatctgg tcaccttcca tccatgcaac aacttgttca 240
aattettgae aatgaaatga ageteaatgt geatatggat teaateecae accategate 300
atagcaccac ctatcagcac tgaaaactct tttgcattaa gggatcattg caagagcagc 360
qtqactqaca ttatqaaqqc ctqtactqaa qacaqcaaqc tqttagtaca gaccagatgc 420
tttcttggca ggctcgttgt acctcttgga aaacctcaat gcaagatagt gtttcagtgc 480
```

```
501
tggcatattt tggaattctg c
<210> 203
<211> 261
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 36, 96
<223> n = A, T, C or G
<400> 203
gacaagetee tggtettgag atgtettete gttaangaga tgggeetttt ggaggtaaag 60
gataaaatga atgagttetg teatgattea etattntata aettgeatga eetttaetgt 120
gttagetett tgaatgttet tgaaatttta gaetttettt gtaaacaaat gatatgteet 180
tatcattgta taaaagctgt tatgtgcaac agtgtggaga ttccttgtct gatttaataa 240
aatacttaaa cactgaaaaa a
<210> 204
<211> 421
<212> DNA
<213> Homo sapiens
<400> 204
agcatctttt ctacaacgtt aaaattgcag aagtagctta tcattaaaaa acaacaacaa 60
caacaataac aataaatcct aagtgtaaat cagttattct accccctacc aaggatatca 120
gcctgttttt tccctttttt ctcctgggaa taattgtggg cttcttccca aatttctaca 180
geotetttcc tettetcatg ettgagette eetgtttgca egeatgegtg tgeaggaetg 240
gettgtgtgc ttggactcgg ctccaggtgg aagcatgctt tcccttgtta ctgttggaga 300
aactcaaacc ttcaagccct aggtgtagcc attttgtcaa gtcatcaact gtatttttgt 360
actggcatta acaaaaaaag aagataaaat attgtaccat taaactttaa taaaacttta 420
                                                                    421
<210> 205
<211> 460
<212> DNA
<213> Homo sapiens
 <400> 205
tactctcaca atgaaggacc tggaatgaaa aatctgtgtc taaacaagtc ctctttagat 60
tttagtgcaa atccagagcc agcgtcggtt gcctcgagta attctttcat gggtaccttt 120
 ggaaaagctc tcaggagacc tcacctagat gcctattcaa gctttggaca gccatcagat 180
 tgtcagccaa gagcctttta tttgaaagct cattcttccc cagacttgga ctctgggtca 240
 gaggaagatg ggaaagaaag gacagatttt caggaagaaa atcacatttg tacctttaaa 300
 cagactttag aaaactacag gactccaaat tttcagtctt atgacttgga cacatagact 360
 gaatgagacc aaaggaaaag cttaacatac tacctcaagg tgaactttta tttaaaagag 420
                                                                    460
 agagaatctt atgtttttta aatggagtta tgaattttaa
 <210> 206
 <211> 481
 <212> DNA
 <213> Homo sapiens
```

```
<400> 206
tgtggtggaa ttcgggacgc ccccagaccc tgactttttc ctgcgtgggc cgtctcctcc 60
tgcggaagca gtgacetetg acceetggtg acettegett tgagtgeett ttgaacgetg 120
gtcccgcggg acttggtttt ctcaagctct gtctgtccaa agacgctccg gtcgaggtcc 180
egectgeeet gggtggatae ttgaaceeea gaegeeeete tgtgetgetg tgteeggagg 240
eggeetteee atetgeetge ceaeceggag etettteege eggegeaggg teecaageee 300
acctecegee eteagteetg eggtgtgegt etgggeaegt eetgeacaca caatgeaagt 360
cetggeetee gegeegee geceaegega geegtaceeg eegeeaacte tgttatttat 420
ggtgtgaccc cctggaggtg ccctcggccc accggggcta tttattgttt aatttatttg 480
                                                                   481
t.
<210> 207
<211> 605
<212> DNA
<213> Homo sapiens
<400> 207
accetttttg gatteaggge teeteacaat taaaatgagt gtaatgaaac aaggtgaaaa 60
tatagaagca teeetttgta taetgttttg etaettaeag tgtaettgge attgetttat 120
ctcactggat teteaeggta ggatttetga gatettaate taageteeaa agttgtetae 180
ttttttgatc ctagggtgct ccttttgttt tacagagcag ggtcacttga tttgctagct 240
ggtggcagaa ttggcaccat tacccaggtc tgactgacca ccagtcagag gcactttatt 300
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aagggctaga ttgggatttg aagacaaaat tgtaggaaat cttacatttt tgcaataaca 480
aacattaatg aaagcaaaac attataaaag taattttaat tcaccacata cttatcaatt 540
tettgatget teeaaatgae atetaceaga tatggttttg tggacatett tttetgttta 600
cataa
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<211> 655
<212> DNA
<213> Homo sapiens
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aggtggcacc aatcttgact tecagatgga acagtacate tataaaagga aaagtgatgg 180
catctatate ataaatetea agaggaeetg ggagaagett etgetggeag etegtgeaat 240
tgttgccatt gaaaaccctg ctgatgtcag tgttatatcc tccaggaata ctggccagag 300
ggctgtgctg aagtttgctg ctgccactgg agccactcca attgctggcc gcttcactcc 360
tggaaccttc actaaccaga tccaggcagc cttccgggag ccacggcttc ttgtggttac 420
tgaccccagg gctgaccacc agcctctcac ggaggcatct tatgttaacc tacctaccat 480
tgcgctgtgt aacacagatt ctcctctgcg ctatgtggac attgccatcc catgcaacaa 540
caagggaget cacteagtgg gtttgatgtg gtggatgetg getegggaag ttetgegeat 600
gcgtggcacc atttcccgtg aacacccatg ggaggtcatg cctgatctgt acttc
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<211> 621
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<213> Homo sapiens
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gccgtagaat cacatgatct gaggaccatt catggaagct gctaaatagc ctagtctggg 180
gagtcttcca taaagttttg catggagcaa acaaacagga ttaaactagg tttggttcct 240
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aagaaacaat ctaaacaagt ttctgttgca tatgtgtttg tgaacttgta tttgtattta 540
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ctattgatga ataaagaaat t
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<211> 533
<212> DNA
<213> Homo sapiens
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<223> n = A, T, C or G
<400> 210
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agaagaaact tgcagaggcc aagtataagg agcgagggac ggtcttggct gaggaccagc 180
tageceagat gteaaageag ttggaeatgt teaagaeeaa eetggaggaa tttgeeagea 240
aacacaagca qqaqatccqq aaqaatcctq aqttccqtqt qcaqttccag gacatgtgtg 300
caaccattgg cgtggatccg ctggcctctg gaaaaggatt ttggtctgag atgctgggcg 360
tgggggactt ctattacgaa ctaggtgtcc aaattatcga agtgtgcctg gcgctgaagc 420
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<211> 451
<212> DNA
<213> Homo sapiens
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ggagcttcag caaggaagtg gaggagcgga gtagagaacg gccctcccag cctgaggggc 180
tgcgcaaggc agctagcete acggaggate gggaccgtgg gcgggatgcc gtgaagcgag 240
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<210> 212
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<212> DNA
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<220>
<221> misc feature
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aacctgtctg acccggtcac gttcttggat cctcagaact ctttgctctt gtcggggtgg 360
gggtgggaac tcacgtgggg agcggtggct gagaaaatgt aaggattctg gaatacatat 420
tocatgggac tttccttccc tctcctgctt cctcttttcc tgctccctaa c
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<210> 213
<211> 511
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 27, 63, 337, 442
<223> n = A, T, C or G
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actttatatt tttccttttg ataaagggat gctgcatagt agagttggtg taattaaact 180
ateteageeg ttteeetget tteeettetg etceatatge etcattgtee tteeagggag 240
ctettttaat ettaaagtte tacattteat getettagte aaattetgtt acetttttaa 300
taactettee cactgeatat ttecatettg aattggnggt tetaaattet gaaactgtag 360
ttgagataca gctatttaat atttctggga gatgtgcatc cctcttcttt gtggttgccc 420
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gccatggccg tgggagtact gggagtaaaa t
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<211> 521
<212> DNA
<213> Homo sapiens
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ctggaatgtg gcattagctt ttttatttta accetettta attettatte aattecatga 180
cttaaggttg gagagctaaa cactgggatt tttggataac agactgacag ttttgcataa 240
ttataategg cattgtacat agaaaggata tggctacett ttgttaaate tgcactttet 300
aaatatcaaa aaagggaaat gaagtataaa tcaatttttg tataatctgt ttgaaacatg 360
agttttattt gcttaatatt agggetttge ceettttetg taagtetett gggateetgt 420
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                                                                   521
<210> 215
<211> 381
<212> DNA
<213> Homo sapiens
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<222> 17, 20, 60, 61, 365
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ccatgagcag cgaggccgag acccagcagc cgcccgccgc cccccccgcc gcccccgccc 180
teagegeege egacaceaag eeeggeacta egggeagegg egeagggage ggtggeeegg 240
gcggcctcac atcggcggcg cctgccggcg gggacaagaa ggtcatcgca acgaaggttt 300
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ccaangaaga tgtatttgta c
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<210> 216
<211> 425
<212> DNA
<213> Homo sapiens
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aacaggccaa teetgaaggt acteeetgtt tgetgeagaa tgteagatat tttggatgtt 180
gcataagagt cetatttgcc ccagttaatt caacttttgt ctgcctgttt tgtggactgg 240
ctggctctgt tagaactctg tccaaaaagt gcatggaata taacttgtaa agcttcccac 300
aattgacaat atatatgcat gtgtttaaac caaatccaga aagcttaaac aatagagctg 360
cataatagta tttattaaag aatcacaact gtaaacatga gaataactta aggattctag 420
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<212> DNA
<213> Homo sapiens
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actttggctt tttcagtgga agaatatgtt gaaggtttca ttttgttcta gaaaaaaaa 180
                                                                   181
<210> 218
<211> 405
<212> DNA
<213> Homo sapiens
<400> 218
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gegetggget gttttagtge caggetgegg tgggeageea tgagaacaaa acetettetg 180
tatttttttt ttccattagt aaaacacaag acttcagatt cagccgaatt gtggtgtctt 240
acaaggcagg cettteetae agggggtgga gagaccagee tttetteett tggtaggaat 300
ggcctgagtt ggcgttgtgg gcaggctact ggtttgtatg atgtattagt agagcaaccc 360
attaatcttt tgtagtttgt attaaacttg aactgagaaa aaaaa
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<211> 216
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> 207, 210
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<211> 380
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<213> Homo sapiens
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gcaccccaag gactcagaag atgattttaa cagttcagaa cagatgtgtg caatattggt 240
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tgcattgaaa aggaaaacct gtctgagaaa atgcctgaca gtttaattta aaactatggt 360
gtaagtcttt gacaaaaaa
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<211> 398
<212> DNA
<213> Homo sapiens
<400> 221
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gtgagtctgc aagtgaattt cactgatgtt gatattcatt gtgtgtagtt ttatttcggt 180
eccageceeg titteetitta tittiggaget aatgecaget gegigtetag tittigagige 240
agtaaaatag aatcagcaaa tcactcttat ttttcatcct tttccggtat tttttgggtt 300
gtttctgtgg gagcagtgta caccaactct tcctgtatat tgcctttttg ctggaaaatg 360
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<210> 222
<211> 301
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<213> Homo sapiens
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<221> misc feature
<222> 49, 64
<223> n = A, T, C or G
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gtgaagattt caaaacctga gagcactttt tctttgttta gaattatgag aaaggcacta 180
gatgacttta ggatttgcat ttttcccttt attgcctcat ttcttgtgac gccttgttgg 240
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<212> DNA
<213> Homo sapiens
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attectteae actgtaattt aatgtgtttt atattetttt gtagtaaaac aacataacte 120
agatttetae aggagaeagt ggttttattt ggattgtett etgtaatagg ttteaataaa 180
gctggatgaa cttaaaaaaa
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<211> 385
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<213> Homo sapiens
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totocaacac cagcaagooc taaccaggge cotoctocac aagttocagt atotoctgga 180
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<211> 560
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<213> Homo sapiens
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Arg Pro Ser Ala Tyr Met Arg Glu His Asn Gln Leu Asn Gly Trp Ser
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Ser Asp Glu Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg
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Gly Asp Met Arg Trp Lys Asn Ser Trp Lys Gly Gly Arg Val Gln Ala
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                                         75
Val Leu Thr Ser Asp Ser Pro Ala Leu Val Gly Ser Asn Ile Thr Phe
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Ala Val Asn Leu Ile Phe Pro Arg Cys Gln Lys Glu Asp Ala Asn Gly
            100
                                 105
                                                     110
```

Asn	Ile	Val 115	Tyr	Glu	Lys	Asn	Cys 120	Arg	Asn	Glu	Ala	Gly 125	Leu	Ser	Ala
Asp	Pro 130	Tyr	Val	Tyr	Asn	Trp 135	Thr	Ala	Trp	Ser	Glu 140	Asp	Ser	Asp	Gly
Glu 145	Asn	Gly	Thr	Gly	Gln 150	Ser	His	His	Asn	Val 155	Phe	Pro	Asp	Gly	Lys 160
Pro	Phe	Pro	His	His 165	Pro	Gly	Trp	Arg	Arg 170	Trp	Asn	Phe	Ile	Tyr 175	Val
Phe	His	Thr	Leu 180	Gly	Gln	Tyr	Phe	Gln 185	Lys	Leu	Gly	Arg	Cys 190	Ser	Val
Arg	Val	Ser 195	Val	Asn	Thr	Ala	Asn 200	Val	Thr	Leu	Gly	Pro 205	Gln	Leu	Met
Glu	Val 210	Thr	Val	Tyr	Arg	Arg 215	His	Gly	Arg	Ala	Tyr 220	Val	Pro	Ile	Ala
Gln 225	Val	Lys	Asp	Val	Tyr 230	Val	Val	Thr	Asp	Gln 235	Ile	Pro	Val	Phe	Val 240
Thr	Met	Phe	Gln	Lys 245	Asn	Asp	Arg	Asn	Ser 250	Ser	Asp	Glu	Thr	Phe 255	Leu
Lys	Asp	Leu	Pro 260	Ile	Met	Phe	Asp	Val 265	Leu	Ile	His	Asp	Pro 270	Ser	His
Phe	Leu	Asn 275	Tyr	Ser	Thr	Ile	Asn 280	Tyr	Lys	Trp	Ser	Phe 285	Gly	Asp	Asn
	290		Phe			295					300			_	
Leu 305	Asn	Gly	Thr	Phe	Ser 310	Leu	Asn	Leu	Thr	Val 315	Lys	Ala	Ala	Ala	Pro 320
			Pro	325					330					335	
			Gly 340					345					350		
		355	Asn				360					365			
	370		Val			375					380				
385			Met		390					395				=	400
			Cys	405					410			_		415	
			Thr 420					425					430		
		435	Glu				440					445			
	450		Tyr			455					460				
465			Ser		470					475					480
			Met 	485					490					495	
			Thr 500					505					510		
		515	Ile				520					525		_	_
Leu	Ser 530	Val	Phe	Leu	Asn	Arg 535	Ala	Lys	Ala	Val	Phe 540	Phe	Pro	Gly	Asn

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Phe Ser Phe Ala
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B. M. Brid. and
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     Asn His Ser Pro Ser
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Man Man
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His Phe Pro His
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     Pro Gly His Trp
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     Gly Ala Asp Val
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     <211> 20
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<212> PRT
<213> Homo sapiens
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Glu Thr Gly Asp
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Leu Thr Phe Arg
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<213> Homo sapiens
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Val Pro Pro Ala
            20
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<211> 153
<212> PRT
<213> Homo sapiens
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Met Ala Ser Val Arg Val Ala Ala Tyr Phe Glu Asn Phe Leu Ala Ala
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Trp Arg Pro Val Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val
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Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
                            40
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
                        55
                                            60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
                    70
                                       75
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
                                    90
Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
            100
                                105
                                                    110
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Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
        115
                            120
Thr His Gln Leu Asn Pro Lys Val Lys Ser Phe Ser Gln Phe Ile Ser
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Glu Asn Gln Gly Ala Phe Lys Gly Met
145
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gagaagetgg gatteeetge ageaaaggaa atageeaata tqtqteqttt etatgaaatg 360
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ttttgattta taagggattt tgccgatttc ggcctattgg ttaaaaaaatg agctgattta 420
acaaaaattt aacgcgaatt ttaacaaaat attaacgttt acaatttcag gtggcacttt 480
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tcatatcagg attatcaata ccatattttt gaaaaagccg tttctgtaat gaaggagaaa 660
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8031

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<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 9, 6\overline{7}, 247, 275, 277, 397
<223> n = A, T, C or G
<400> 255
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gacactgaga ggcccattct gcaagtggac agctgtgtct ttgctgggga gtatgaagac 240
actetangga eetgtgttat atttgaagaa aatgntnaae atgetgatae agaaggeaat 300
aataaaacag tgctaaaata taaatgccat acaatgaaga agctcagcat gacaagaact 360
ctcctgacag agaagaagga aggagaagaa aacatangtg g
<210> 256
<211> 401
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> 7, 37, 51, 79, 96, 98, 103, 104, 107, 116, 167, 181, 183,
194, 206, 276, 303, 307, 308, 310, 323, 332, 341, 353, 374,
376
<223> n = A, T, C or G
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gggccggggt cgcggccgng gacggggccg gggccnangc cgnnganctc gcggangcaa 120
ggccgaggat aaggagtgga tgcccgtcac caacttgggc cgcttgncca aggacatgaa 180
nancaagece etgnaggaga tetatntett etteeetgee ecattaagga ateaagagat 240
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canaaannan acccegttge cengteeate theacceaae netteeaagg genatttttg 360
tttaggcctc attncngggg ggaaccttaa cccaatttgg g
                                                                     401
<210> 257
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 382, 387
<223> n = A, T, C or G
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ttaaaatatc tgctaagtaa tttgctatgt cttctcccac actatcaata tgcctgcttc 180
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gaaactccca gttaaagcct angctancaa ttttttttag t
                                                                   401
<210> 258
<211> 401
<212> DNA
<213> Homo sapiens
<400> 258
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tgaggggccg ggcccaagct gccgacccga gccgatcgtc agggtcgcca gcgcctcagc 120
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caattttcat ctttgcaatc tgcattttaa tgataacaga attaattctg gcctcaaaaa 240
getactatga tatettaggt gtgccaaaat eggcatcaga gegccaaate aagaaggeet 300
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<211> 401
<212> DNA
<213> Homo sapiens
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acageteagg eteacagaag ggeagaaact ttgattttea geegeeatge tgtgattgee 180
gtccgaaatg gcaagctgtg cttcatgttc cqaqtqqqtq acctqaqqaa aaqcatqatc 240
attagtgcct ctgtgcgcat ccaggtggtc aagaaaacaa ctacacctga aggggaggtg 300
gttcctattc accaactgga cattcctgtt gataacccaa tcgagagcaa taacattttt 360
ctggtggccc ctttgatcat ctgccacqtq attgacaagc q
                                                                  401
<210> 260
<211> 363
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 7, 9, 19, 41, 63, 73, 106, 111, 113, 116, 119, 156, 158,
162, 187, 247, 288, 289, 290, 292, 298, 299, 300, 340
<223> n = A, T, C or G
<400> 260
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canggagagg aancagaaag gagaggcaag acagggagac acacancaca nangangana 120
caggtggggg ctggggtggg gcatggaqaq cctttnangt cncccaggcc accctqctct 180
egetggnetg ttgaaaccca etceatgget teetgeeact geagttggge eeagggetgg 240
cttattnctg gaatgcaagt ggctgtggct tggagcctcc cctctggnnn anggaaannn 300
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aca
<210> 261
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 114, 152
<223> n = A, T, C or G
<400> 261
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gggcacagat gaggagagca tcctgactct gttgacatcc cgaagtaatg ctcagcgcca 240
ggaaatetet geagetttta agaetetgtt tggeagggat ettetggatg acetgaaate 300
agaactaact ggaaaatttg aaaaattaat tgtggetetg atgaaaceet eteggettta 360
tgatgcttat gaactgaaac atgccttgaa gggagctgga a
                                                                   401
<210> 262
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 7, 26, 258, 305, 358, 373, 374, 378
<223> n = A, T, C or G
<400> 262
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agtttataac atgaagaata ttgtaccatt atacattttc attctcgatc tcataagaaa 180
ttcaaaagaa taatgataga ggtgaaaata tgtttacttt ctctaaatca agcctagttg 240
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<210> 263
<211> 401
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> 232, 290, 304, 326, 383
<223> n = A, T, C or G
<400> 263
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geggeggtgg eggetaggge ggeggegaat aaaggggeeg eegeegggtg atgeggtgae 180
cactgeggea ggeecaggag etgagtggge eeeggeeete ageeegteee gneggaeeeg 240
ctttcctcaa ctctccatct tctcctgccg accgagatcg ccgaggcggn ctcaggctcc 300
ctancecett eccegteeet tecceneece egteeegee eegggggeeg eegeeaeeeg 360
cctcccacca tggctctgaa ganaatccac aaggaattga a
<210> 264
<211> 401
<212> DNA
<213> Homo sapiens
<400> 264
aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt tctgcgccta 60
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actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc aacttggctg 180
cttcacattt tcatcccctc ctgcatcatt gctttcattt tcatagccac agtgatagcc 240
ctaagaaaac aactetgtea aaagetgtat tetteaaaag acacaacaaa aagacetgte 300
accacaacaa agagggaagt gaacagtgct gtgaatctga acctgtggtc ttgggagcca 360
gggtgacctg atatgacatc taaagaagct tctggactct g
                                                                   401
<210> 265
<211> 271
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 59
<223> n = A, T, C or G
<400> 265
gccactteet gtggacatgg gcagageget gctgccagtt cctggtagec ttgaccacna 60
cgctgggggg tctttgtgat ggtcatgggt ctcatttgca cttgggggtg tgggattcaa 120
gttagaagtt totagatotg googggogoa gtggotoaca cotgtaatoo cagcacttta 180
ggaggetgag geaggeggat catgaggtea ggagategag accgteetgg etaacacagt 240
gaaaccccgt ctctactaaa aatacaaaaa a
<210> 266
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 45
<223> n = A, T, C or G
<400> 266
attcataaat ttagctgaaa gatactgatt caatttgtat acagngaata taaatgagac 60
gacagcaaaa ttttcatgaa atgtaaaata tttttatagt ttgttcatac tatatgaggt 120
tctattttaa atgactttct ggattttaaa aaatttcttt aaatacaatc atttttgtaa 180
tatttattt atgcttatga tctagataat tgcagaatat cattttatct gactctgtct 240
tcataagaga gctgtggccg aattttgaac atctgttata gggagtgatc aaattagaag 300
gcaatgtgga aaaacaattc tgggaaagat ttctttatat gaagtccctg ccactagcca 360
```

```
gccatcctaa ttgatgaaag ttatctgttc acaggcctgc a
                                                                   401
<210> 267
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 116, 247, 277, 296, 307, 313, 322, 323, 336, 342, 355, 365,
377, 378, 397
<223> n = A, T, C or G
<400> 267
gaagaggcat cacctgatec eggagacett tggagttaag aggeggegga agegagggee 60
tgtggagtcg gatcctcttc ggggtgagcc agggtcggcg cgcgcggctg tctcanaact 120
catgcagctg ttcccgcgag gcctgtttga ggacgcgctg ccgcccatcg tgctgaggag 180
ccaggtgtac agcettgtgc ctgacaggac cgtggccgac cggcagctga aggagettca 240
agagcanggg gagacaaaat cgtccagctg ggcttcnact tggatgccca tggaanttat 300
tetttenett ganggaetta enngggaece aagaaneeet tneaagggge eettngtgga 360
tgggncccga aaccccnnta tttgcccttg ggggggncca a
<210> 268
<211> 223
<212> DNA
<213> Homo sapiens
<400> 268
tegecatgtt ggecaggetg gtettgaact cetgaettta agtgatecae eegecteaac 60
ctcccaaagt gctgggatta caggtgtgag ccaccgcgcc tggcctgata catactttta 120
qaatcaaqta qtcacqcact ttttctqttc atttttctaa aaaqtaaata tacaaatqtt 180
ttgttttttg tttttttgt ttgtttgttt ctgtttttt ttt
                                                                   223
<210> 269
<211> 401
<212> DNA
<213> Homo sapiens
<400> 269
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tgctagttca tttgaatatt tctcccaact tatccaagga tctccagctc taacaaaatg 120
gtttattttt atttaaatgt caatagttgt tttttaaaat ccaaatcaga ggtgcaggcc 180
accagttaaa tgccgtctat caggttttgt gccttaagag actacagagt caaagctcat 240
ttttaaagga gtaggacaaa gttgtcacag gtttttgttg ttgtttttat tgcccccaaa 300
attacatgtt aattteeatt tatateaggg attetattta ettgaagaet gtgaagttge 360
                                                                   401
cattttgtct cattgttttc tttgacataa ctaggatcca t
<210> 270
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> 240, 382

<210> 273 <211> 401

```
<223> n = A, T, C or G
     <400> 270
     tggctgttga ttcacctcag cactgcttgg tatctgcacc ctacctctct ttagaggctg 60
     ccttgtcaac tgaaaaatgc acctgacttc gagcaagact ctttccttag gttctggatc 120
     tgtttgagcc ccatggcact gagctggaat ctgagggtct tgttccaagg atgtgatgat 180
     gtgggagaat gttctttgaa agagcagaaa tccagtctgc atggaaacag cctgtagagn 240
     agaagtttcc agtgataagt gttcactgtt ctaaggaggt acaccacagc tacctgaatt 300
     tteccaaaat gagtgettet gtgegttaca actggeettt gtacttgact gtgatgaett 360
     tgttttttct tttcaattct anatgaacat gggaaaaaat g
                                                                         401
     <210> 271
     <211> 329
     <212> DNA
     <213> Homo sapiens
<400> 271
+13
     ccacagcete caagteaggt ggggtggagt eccagagetg cacagggttt ggeecaagtt 60
12
     tctaagggag gcacttcctc ccctcgccca tcagtgccag cccctgctgg ctggtgcctg 120
+ []
     agreected acageceet geological etgeettet cagggaette tgeggggeet 180
     gaggcaagcc atggagtgag acccaggagc cggacacttc tcaggaaatg gcttttccca 240
٠...
     acceccagee eccacceggt ggttetteet gttetgtgae tgtgtatagt gecaccacag 300
٠.,١
     cttatggcat ctcattgagg acaaaaaa
                                                                         329
÷.,;
<210> 272
     <211> 401
3
125
     <212> DNA
121
     <213> Homo sapiens
11,1
     <220>
110
     <221> misc feature
125
     <222> 1, 7, 12, 21, 61, 62, 66, 72, 78, 88, 90, 92, 98, 117, 119,
Î-A
     128, 130, 134, 142, 144, 151, 159, 162, 164, 168, 169, 177,
     184, 185, 188, 194, 202, 204, 209, 213, 218, 223, 231, 260,
     272, 299, 300, 306, 321, 322, 323, 331, 335, 336, 338
     <223> n = A, T, C or G
     <221> misc feature
     <222> 341, 342, 343, 345, 346, 351, 358, 360, 362, 363, 387, 390,
     <223> n = A, T, C or G
     <400> 272
     nggctgntaa enteggaggt nactteetgg actateetgg agaceeecte egetteeaeg 60
     nncatnatat eneteatnge tgggeeentn angacaenat eccaetecaa caeetgngng 120
     atgctggnen cetnggaace anenteagaa ngaccetgnt entntgtnnt cegeaanetg 180
     aagnnaange gggntacace thentgeant ggnecaenet gengggaact ntacacacet 240
     acgggatgtg gctgcgccan gagccaagag cntttctgga tgattcccca gcctcttgnn 300
     agggantcta caacattgct nnntaccttt ntccnncnge nnntnntgga ntacaggngn 360
     tnntaacact acatcttttt tactgeneen tnettggtgg g
                                                                         401
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```
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 399
<223> n = A, T, C or G
<400> 273
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tggctccatc ctggcctcac tgtccacctt ccagcagatg tggattagca agcaggagta 120
cgacgagtcg ggcccctcca tcgtccaccg caaatgcttc taaacggact cagcagatgc 180
qtaqcatttq ctqcatqqqt taattqaqaa taqaaatttq cccctqqcaa atqcacacac 240
ctcatqctaq cctcacqaaa ctqqaataaq ccttcqaaaa gaaattqtcc ttqaaqcttq 300
tatctgatat cagcactgga ttgtagaact tgttgctgat tttgaccttg tattgaagtt 360
aactgttccc cttggtatta acgtgtcagg gctgagtgnt c
<210> 274
<211> 401
<212> DNA
<213> Homo sapiens
<400> 274
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egeogeocag gecategeoa coeteegeag coatgteeae caggteegtg teetegteet 120
cctaccgcag gatgttcggc ggcccgggca ccgcgagccg gccgagctcc agccggagct 180
acgtgactac gtccaccege acctacagee tgggcagege getgegeeee ageaccagee 240
geagesteta egestegtes segggeggeg tgtatgesas gegstestet geogtgeges 300
tgcggagcag cgtgcccggg gtgcggctcc tgcaggactc ggtggacttc tcgctggccg 360
acgccatcaa caccgagttc aagaacaccc gcaccaacga g
                                                                   401
<210> 275
<211> 401
<212> DNA
<213> Homo sapiens
<400> 275
ccacttccac cactttgtgg ageagtgeet teagegeaac eeggatgeea ggtateeetg 60
ctggcctggg cctgggcttc gggagagcag agggtgctca ggagggtaag gccagggtgt 120
gaagggactt acctcccaaa ggttctgcag gggaatctgg agctacacac aggagggatc 180
ageteetggg tgtgteagag geeageetgg ggagetetgg ceaetgette ceatgagetg 240
agggagaggg agaggggacc cgaggctgag gcataagtgg caggatttcg ggaagctggg 300
gacacqqcaq tqatqctqcq qtctctcctc ccctttccct ccaqqcccaq tqccaqcacc 360
ctcctgaacc actctttctt caagcagatc aagcgacgtg c
                                                                   401
<210> 276
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 11
<223> n = A, T, C or G
```

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<400> 276
tetgatattg ntaccettga gecacetaag ttagaagaaa ttggaaatca agaagttgte 60
attgttgaag aagcacagag ttcagaagac tttaacatgg gctcttcctc tagcagccag 120
tatactttct gtcagccaga aactgtattt tcatctcagc ctagtgatga tgaatcaagt 180
agtgatgaaa ccagtaatca geecagteet geetttagae gaegeegtge taggaagaag 240
accepttecte etteagaate teaagacege etagttegte aacaagaaac teaacettet 300
aaggagttga gtaaacgtca gttcagtagt ggtctcaata agtgtgttat acttgctttg 360
qtgattgcaa tcaqcatggg atttggccat ttctatggca c
<210> 277
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> 227, 333
<223> n = A, T, C or G
<400> 277
aactttggca acatatctca gcaaaaacta cagctatgtt attcatgcca aaataaaagc 60
tgtgcagagg agtggctgca atgaggtcac aacggtggtg gatgtaaaag agatcttcaa 120
gtcctcatca cccatccctc gaactcaagt cccgctcatt acaaattctt cttgccagtg 180
tecacacate etgeeceate aagatgttet cateatgtgt tacgagngge geteaaggat 240
gatgettett gaaaattget tagttgaaaa atggagagat cagettagta aaagateeat 300
acagtgggaa gagaggctgc aggaacagcg ganaacagtt caggacaaga agaaaacagc 360
cgggcgcacc agtcgtagta atccccccaa accaaaggga a
                                                                   401
<210> 278
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 322, 354
<223> n = A, T, C or G
<400> 278
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ggcttccgtt gttatccacg aaatccttgt caagatccct acattctaac accagagaac 120
cgatgtgttt gcccagtctc aaatgccatg tgccgagaac tgccccagtc aatagtctac 180
aaatacatga gcatccgatc tgataggtct gtgccatcag acatcttcca gatacaggcc 240
acaactattt atgccaacac catcaatact tttcggatta aatctggaaa tgaaaatgga 300
gagtetacet acgacaacaa anceetgtaa gtgcaatget tgtgetegtg aagneattat 360
caggaccaag agaacatatc gtggacctgg agatgctgac a
                                                                   401
<210> 279
<211> 401
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
<222> 30, 35, 81, 88, 180, 212, 378, 384, 391
<223> n = A, T, C or G
<400> 279
aaattattgc ctctgataca tacctaagtn aacanaacat taatacctaa gtaaacataa 60
cattacttgg agggttgcag nttctaantg aaactgtatt tgaaactttt aagtatactt 120
taggaaacaa gcatgaacgg cagtctagaa taccagaaac atctacttgg gtagcttggn 180
gccattatcc tgtggaatct gatatgtctg gnagcatgtc attgatggga catgaagaca 240
tctttggaaa tgatgagatt atttcctgtg ttaaaaaaaa aaaaaatctt aaattcctac 300
aatgtgaaac tgaaactaat aattttgatc ctgatgtatg ggacagcgta tctgtaccag 360
gctctaaata acaaaagnta gggngacaag nacatgttcc t
                                                                   401
<210> 280
<211> 326
<212> DNA
<213> Homo sapiens
<400> 280
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gttttttttt ttgtttttt tttaagaact tgaaacttgt aaactgagat gtctgtagct 120
tttttgccca tctgtagtgt atgtgaagat ttcaaaacct gagagcactt tttctttgtt 180
tagaattatg agaaaggcac tagatgactt taggatttgc atttttccct ttattgcctc 240
atttettgtg acgcettgtt ggggagggaa atetgtttat ttttteetae aaataaaaag 300
                                                                   326
ctaagattct atatcgcaaa aaaaaa
<210> 281
<211> 374
<212> DNA
<213> Homo sapiens
<400> 281
caacgcgttt gcaaatattc ccctggtagc ctacttcctt acccccgaat attggtaaqa 60
tegageaatg getteaggae atgggttete tteteetgtg ateatteaag tgeteaetge 120
atgaagactg gettgtetea gtgttteaac eteaceaggg etgtetettg gteeacacet 180
egeteeetgt tagtgeegta tgacageece catcaaatga eettggeeaa gteaeggttt 240
ctctgtggtc aaggttggtt ggctgattgg tggaaagtag ggtggaccaa aggaggccac 300
gtgagcagtc agcaccagtt ctgcaccagc agcgcctccg tcctagtggg tgttcctgtt 360
teteetggee etgg
                                                                   374
<210> 282
<211> 404
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 26, 27, 51, 137, 180, 222
<223> n = A, T, C or G
<400> 282
agtgtggtgg aattcccgca tcctanncgc cgactcacac aaggcagagt ngccatggag 60
aaaattccag tgtcagcatt cttgctcctt gtggccctct cctacactct ggccagagat 120
accacagtca aacctgnagc caaaaaggac acaaaggact ctcgacccaa actgccccan 180
```

```
acceteteca gaggttgggg tgaccaacte atetggacte anacatatga agaageteta 240
tataaatcca agacaagcaa caaaccettg atgattatte atcacttgga tgagtgeeca 300
cacagtcaag ctttaaagaa agtgtttgct gaaaataaag aaatccagaa attggcagag 360
cagtttgtcc tcctcaatct ggtttatgaa acaactgaca aaca
<210> 283
<211> 184
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 26
<223> n = A, T, C or G
<400> 283
agtgtggtgg aattcacttg cttaanttgt gggcaaaaga gaaaaagaag gattgatcag 60
agcattgtgc aatacagttt cattaactcc ttccctcgct cccccaaaaa tttgaatttt 120
tttttcaaca ctcttacacc tgttatggaa aatgtcaacc tttgtaagaa aaccaaaata 180
<210> 284
<211> 421
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 147, 149
\langle 223 \rangle n = A,T,C or G
<400> 284
ctattaatcc tgccacaata tttttaatta cgtacaaaga tctgacatgt cacccaggga 60
cccatttcac ccactgetet gtttggccgc cagtettttg tetetetet cagcaatggt 120
gaggeggata ecetteete ggggaanana aateeatggt ttgttgeeet tgeeaataae 180
aaaaatgttg gaaagtcgag tggcaaagct gttgccattg gcatctttca cgtgaaccac 240
gtcaaaagat ccagggtgcc tetetetgtt ggtgatcaca ccaattette etaggttage 300
acctccagtc accatacaca ggttaccagt gtcgaacttg atgaaatcag taatcttgcc 360
agtetetaaa teaatetgaa tggtateatt eacettgatg aggggategg ggtageggat 420
g
                                                                    421
<210> 285
<211> 361
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 34, 188
<223> n = A, T, C or G
<400> 285
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cactgtgcag gcttcagctt ccactccggg caggattcag gctatctggg accgcaggga 120
```

```
ctgccaggtg cacageeetg geteeegagg caggeaggea aggtgaeggg actggaagee 180
     cttttcanag ccttggagga gctggtccgt ccacaagcaa tgagtgccac tctgcagttt 240
     qcaqqqqatq qataaacaqq qaaacactgt qcattcctca cagccaacag tgtaggtctt 300
     ggtgaagccc cggcgctgag ctaagctcag gctgttccag ggagccacga aactgcaggt 360
                                                                          361
     <210> 286
     <211> 336
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> 40, 68, 75, 127, 262
     <223> n = A, T, C or G
     <400> 286
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     ggaggaanag ccganaaact gtgtgaccgg ggcctcaggt ggtgggcatt gggggctcct 120
ij
     cttgcanatg cccattggca tcaccggtgc agccattggt ggcagcgggt accggtcctt 180
     tcttgttcaa catagggtag gtggcagcca cgggtccaac tcgcttgagg ctgggccctg 240
ij
     ggcgctccat tttgtgttcc angagcatgt ggttctgtgg cgggagcccc acgcaggccc 300
١, ١
i ng
     tgaggatgtt ctcgatgcag ctgcgctggc ggaaaa
                                                                          336
<210> 287
ij,
     <211> 301
ÿ
     <212> DNA
120
     <213> Homo sapiens
ij,
<220>
<221> misc feature
     \langle 222 \rangle 15, \overline{3}3, 44, 53, 76, 83, 107, 117, 154, 166, 192, 194, 207,
E E
     215, 241, 246
<223> n = A, T, C or G
     <400> 287
      tgggtaccaa atttntttat ttgaaggaat ggnacaaatc aaanaactta agnggatgtt 60
      ttggtacaac ttatanaaaa ggnaaaggaa accccaacat gcatgcnctg ccttggngac 120
     cagggaagtc accccacggc tatggggaaa ttancccgag gcttancttt cattatcact 180
      gtctcccagg gngngcttgt caaaaanata ttccnccaag ccaaattcgg gcgctcccat 240
     nttgcncaag ttggtcacgt ggtcacccaa ttctttgatg gctttcacct gctcattcag 300
                                                                           301
      <210> 288
      <211> 358
      <212> DNA
      <213> Homo sapiens
      <220>
      <221> misc feature
      <222> 39, 143, 226
      <223> n = A,T,C or G
      <400> 288
```

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aagtttttaa actttttatt tgcatattaa aaaaattgng cattccaata attaaaatca 60
     tttgaacaaa aaaaaaaatg gcactctgat taaactgcat tacagcctgc aggacacctt 120
     gggccagctt ggttttactc tanatttcac tgtcgtccca ccccacttct tccaccccac 180
     ttcttccttc accaacatgc aagttctttc cttccctgcc agccanatag atagacagat 240
     gggaaaggca ggcgcgcct tcgttgtcag tagttctttg atgtgaaagg ggcagcacag 300
     tcatttaaac ttgatccaac ctctttgcat cttacaaagt taaacagcta aaagaagt
     <210> 289
     <211> 462
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> 87, 141, 182, 220, 269, 327
     <223> n = A, T, C or G
     <400> 289
114
     ggcatcagaa atgctgttta tttctctgct gctcccaagc tggctggcct ttgcagagga 60
A STATE
     gcagacaaca gatgcatagt tgggganaaa gggaggacag gttccaggat agagggtgca 120
169
     ggctgaggga ggaagggtaa naggaaggaa ggccatcctg gatccccaca tttcagtctc 180
     anatgaggac aaagggactc ccaagccccc aaatcatcan aaaacaccaa ggagcaggag 240
٠
پوچ
     gagettgage aggeeceagg gageeteana geeataceag eeactgteta etteecatee 300
١., ا
     tectetecea ttecetgtet getteanace aceteceage taageceeag etecatteee 360
١., ١
     ccaatectgg cccttgccag cttgacagte acagtgcctg gaattecace actgaggett 420
ctcccagttg gattaggacg tcgccctgtt agcatgctgc cc
                                                                         462
5
1 25
     <210> 290
122
     <211> 481
     <212> DNA
<213> Homo sapiens
H
100
     <220>
i ak
     <221> misc feature
     <222> 44, 57, 122, 158, 304, 325, 352, 405
     <223> n = A, T, C or G
     <400> 290
     tactttccta aactttatta aagaaaaaag caataagcaa tggnggtaaa tctctanaac 60
     atacccaatt ttctgggctt cctcccccga gaatgtgaca ttttgatttc caaacatgcc 120
     anaagtgtat ggttcccaac tgtactaaag taggtganaa gctgaagtcc tcaagtgttc 180
     atcttccaac ttttcccagt ctgtggtctg tctttggatc agcaataatt gcctgaacag 240
     ctactatggc ttcgttgatt tttgtctgta gctctctgag ctcctctatg tgcagcaatc 300
     gcanaatttg agcagettea ttaanaactg cateteetgt gteaaaaeca anaatatgtt 360
     tgtctaaagc aacaggtaag coctcttttg tttgatttgc cttancaact gcatcctgtg 420
     teaggegete etgaaceaaa ateegaattg cettaageat taeeaggtaa teateatgae 480
                                                                         481
     <210> 291
     <211> 381
     <212> DNA
     <213> Homo sapiens
     <220>
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```
<221> misc feature
<222> 79, 166, 187, 208, 219, 315
<223> n = A, T, C or G
<400> 291
tcatagtaat gtaaaaccat ttgtttaatt ctaaatcaaa tcactttcac aacagtgaaa 60
attagtgact ggttaaggng tgccactgta catatcatca ttttctgact ggggtcagga 120
cctggtccta gtccacaagg gtggcaggag gagggtggag gctaanaaca cagaaaacac 180
acaaaanaaa qqaaaqctqc cttqqcanaa ggatgaggng gtgagcttgc cgaaggatgg 240
tgggaagggg geteeetgtt ggggeegage eaggagteee aagteagete teetgeetta 300
cttagctcct ggcanagggt gagtggggac ctacgaggtt caaaatcaaa tggcatttgg 360
                                                                   381
ccaqcctggc tttactaaca g
<210> 292
<211> 371
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 32, 55, 72, 151, 189, 292
<223> n = A, T, C or G
<400> 292
gaaaaaataa teegtttaat tgaaaaacet gnaggataet atteeactee eecanatgag 60
qaqqctgagg anaccaaacc cctacatcac ctcgtagcca cttctgatac tcttcacgag 120
gcagcaggca aagacaattc ccaaaacctc nacaaaagca attccaaggg ctgctgcagc 180
taccaccanc acatttttcc tcagccagcc cccaatcttc tccacacagc cctccttatg 240
gategeette tegttgaaat taateeeaca geecaeagta acattaatge aneaggagte 300
ggggactegg ttettegaca tggaagggat ttteteecaa tetgtgtagt tageageeec 360
                                                                   371
acaqcactta a
<210> 293
<211> 361
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 75, 196, 222
<223> n = A, T, C or G
<400> 293
gatttaaaag aaaacacttt attgttcagc aattaaaagt tagccaaata tgtatttttc 60
tccataattt attgngatgt tatcaacatc aagtaaaatg ctcattttca tcatttgctt 120
ctqttcatqt tttcttqaac acqtcttcaa ttttccttcc aaaatgctgc atgccacact 180
tgaggtaacg aagcanaagt atttttaaac atgacagcta anaacattca tctacagcaa 240
cctatatgct caatacatgc cgcgtgatcc tagtagtttt ttcacaacct tctacaagtt 300
tttggaaaac atctgttatg atgactttca tacaccttca cctcaaaggc tttcttgcac 360
                                                                    361
<210> 294
<211> 391
<212> DNA
```

```
prince curry course, terms convey, see course, see as the curry, see course, see convey in a see as the curry course course in a see as the curry course in a see
```

```
<213> Homo sapiens
<220>
<221> misc feature
\langle 222 \rangle 26, \overline{7}7, 96, 150, 203, 252, 254, 264, 276
<223> n = A, T, C or G
<400> 294
tattttaaaq tttaattatq attcanaaaa aatcqaqcqa ataactttct ctgaaaaaat 60
atattgactc tgtatanacc acagttattg gggganaagg gctggtaggt taaattatcc 120
tattttttat tctgaaaatg atattaatan aaagtcccgt ttccagtctg attataaaga 180
tacatatqcc caaaatqqct qanaataaat acaacaggaa atgcaaaagc tgtaaagcta 240
agggcatgca ananaaaatc tcanaatacc caaagnggca acaaggaacg tttggctgga 300
atttgaagtt atttcagtca tetttgtett tggeteeatg tttcaggatg egtgtgaact 360
                                                                    391
cgatgtaatt gaaattcccc tttttatcaa t
<210> 295
<211> 343
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 145, 174, 205, 232
<223> n = A, T, C or G
<400> 295
ttcttttgtt ttattgataa cagaaactgt gcataattac agatttgatg aggaatctgc 60
aaataataaa gaatgtgtct actgccagca aaatacaatt attccatgcc ctctcaacat 120
acaaatataq aqttcttcac accanatggc tctggtgtaa caaagccatt ttanatgttt 180
aattgtgctt ctacaaaacc ttcanagcat gaggtagttt cttttaccta cnatattttc 240
cacatttcca ttattacact tttagtgagc taaaatcctt ttaacatagc ctgcggatga 300
tctttcacaa aagccaagcc tcatttacaa agggtttatt tct
                                                                     343
<210> 296
<211> 241
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 96, 98, 106, 185
<223> n = A, T, C or G
<400> 296
ttcttggata ttggttgttt ttgtgaaaaa gtttttgttt ttcttctcag tcaactgaat 60
tatttctcta ctttgccctc ctgatgccca catgananaa cttaanataa tttctaacag 120
cttccacttt ggaaaaaaa aaaacctgtt ttcctcatgg aaccccagga gttgaaagtg 180
gatanatcgc tctcaaaatc taaggctctg ttcagcttta cattatgtta cctgacgttt 240
<210> 297
<211> 391
<212> DNA
```

```
the first state cities cities are a constant and a constant are a constant and the first f
```

```
<213> Homo sapiens
<220>
<221> misc feature
<222> 12, 130
\langle 223 \rangle n = A,T,C or G
<400> 297
gttgtggctg anaatgctgg agatgctcag ttctctccct cacaaggtag gccacaaatt 60
cttggtggtg ccctcacatc tggggtcttc aggcaccagc catgcctgcc gaggagtgct 120
gtcaggacan accatgtccg tgctaggccc aggcacagcc caaccactcc tcatccaagt 180
ctctcccagg tttctggtcc cgatgggcaa ggatgacccc tccagtggct ggtaccccac 240
cateceacta ecceteacat geteteacte tecateaggt ecceaateet ggetteecte 300
ttcacgaact ctcaaagaaa aggaaggata aaacctaaat aaaccagaca gaagcagctc 360
tggaaaagta caaaaagaca gccagaggtg t
<210> 298
<211> 321
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 14, 30, 76, 116, 201, 288, 301
<223> n = A, T, C or G
<400> 298
caagccaaac tgtntccagc tttattaaan atactttcca taaacaatca tggtatttca 60
ggcaggacat gggcanacaa tcgttaacag tatacaacaa ctttcaaact cccttnttca 120
atggactacc aaaaatcaaa aagccactat aaaacccaat gaagtettea tetgatgete 180
tgaacaggga aagtttaaag ngagggttga catttcacat ttagcatgtt gtttaacaac 240
ttttcacaag ccgaccctga ctttcaggaa gtgaaatgaa aatggcanaa tttatctgaa 300
natccacaat ctaaaaatgg a
                                                                    321
<210> 299
<211> 401
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 104, 268, 347
<223> n = A, T, C or G
<400> 299
tatcataaag agtgttgaag tttatttatt atagcaccat tgagacattt tgaaattgga 60
attggtaaaa aaataaaaca aaaagcattt gaattgtatt tggnggaaca gcaaaaaaag 120
agaagtatca tttttctttg tcaaattata ctgtttccaa acattttgga aataaataac 180
tggaattttg tcggtcactt gcactggttg acaagattag aacaagagga acacatatgg 240
agttaaattt tttttgttgg gatttcanat agagtttggt ttataaaaaag caaacagggc 300
caacqtccac accaaattct tqatcaqqac caccaatqtc ataqqqnqca atatctacaa 360
taggtagtct cacagccttq cqtqttcqat attcaaaqac t
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<210> 300

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<211> 188
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> 48
     <223> n = A, T, C or G
     <400> 300
     tqaatqcttt qtcatattaa qaaaqttaaa qtqcaataat gtttqaanac aataagtggt 60
     ggtgtatctt gtttctaata agataaactt ttttgtcttt gctttatctt attagggagt 120
     tgtatgtcag tgtataaaac atactgtgtg gtataacagg cttaataaat tctttaaaag 180
                                                                         188
     qaaaaaaa
     <210> 301
     <211> 291
     <212> DNA
<213> Homo sapiens
100
     <400> 301
1.2
     aagattttgt tttattttat tatggctaga aagacactgt tatagccaaa atcggcaatg 60
acactaaaga aatcctctgt gcttttcaat atgcaaatat atttcttcca agagttgccc 120
t : ; ;
     tggtgtgact tcaagagttc atgttaactt cttttctgga aacttccttt tcttagttgt 180
     tgtattettg aagageetgg gecatgaaga gettgeetaa gttttgggea gtgaacteet 240
Ħ
     tgatgttctg gcagtaagtg tttatctggc ctgcaatgag cagcgagtcc a
ğ
1 2 2
     <210> 302
132
     <211> 341
<212> DNA
<213> Homo sapiens
<220>
12
     <221> misc feature
     <222> 25
     <223> n = A, T, C or G
     <400> 302
     tgatttttca taattttatt aaatnatcac tgggaaaact aatggttcgc gtatcacaca 60
     attacactac aatctgatag gagtggtaaa accagccaat ggaatccagg taaagtacaa 120
     aaacgccacc ttttattgtc ctgtcttatt tctcgggaag gagggttcta ctttacacat 180
     ttcatgagcc agcagtggac ttgagttaca atgtgtaggt tccttgtggt tatagctgca 240
     gaagaagcca tcaaattctt gaggacttga catctctcgg aaagaagcaa actagtggat 300
     cccccgggct gcaggaattc gatatcaagc ttatcgatac c
                                                                         341
     <210> 303
     <211> 361
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> 15, 27, 92, 124, 127, 183, 198, 244, 320
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<223> n = A, T, C or G

```
<400> 303
tgcagacagt aaatnaattt tatttgngtt cacagaacat actaggcgat ctcgacagtc 60
getecqtqae ageceaceaa ecceeaacee tntacetege agecaceeta aaggegaett 120
caanaanatg gaaggatete aeggatetea tteetaatgg teegeegaag teteacaeag 180
tanacagacg gagttganat gctggaggat gcagtcacct cctaaactta cgacccacca 240
ccanacttca teccageegg gaegteetee eccaeeegag tecteeceat ttetteteet 300
actttgccgc agttccaggn gtcctgcttc caccagtccc acaaagctca ataaatacca 360
<210> 304
<211> 301
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 23, 104, 192
<223> n = A, T, C or G
<400> 304
ctetttacaa cageetttat tineggeeet tgateetget eggatgetgg tggaggeeet 60
tageteegee egecaggete tgtgeegeet eeeegeagge geanatteat gaacaeggtg 120
ctcaggggct tgaggccgta ctcccccagc gggagctggt cctccagggg cttcccctcg 180
aaggtcagcc anaacaggtc gtcctgcaca ccctccagcc cgctcacttg ctgcttcagg 240
tgggccacgg tctgcgtcag ccgcacctcg taggtgctgc tgcggccctt gttattcctc 300
                                                                   301
<210> 305
<211> 331
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> 3, 36, 60, 193, 223
<223> n = A, T, C or G
<400> 305
qanaqqctaq taacatcagt tttattgggt tggggnggca accatagcct ggctgggggn 60
ggggctggcc ctcacaggtt gttgagttcc agcagggtct ggtccaaggt ctggtgaatc 120
tcgacgttct cctccttggc actggccaag gtctcttcta ggtcatcgat ggttttctcc 180
aactttgcca canacctctc ggcaaactct gctcgggtct cancetcctt cagcttctcc 240
tocaacagtt tgatotocto ttoatattta tottotttgg gggaatacto otoototgag 300
                                                                    331
gccatcaggg acttgagggc ctggtccatg g
<210> 306
<211> 457
<212> DNA
<213> Homo sapiens
<400> 306
aatatqtaaa qqtaataact tttattatat taaaqacaat gcaaacgaaa aacagaattg 60
agcagtgcaa aatttaaagg actgttttgt tctcaaagtt gcaagtttca aagccaaaag 120
```

```
aattatatgt atcaaatata taagtaaaaa aaagttagac tttcaagcct gtaatcccag 180
cactttggga ggctgaggca ggtggatcac taacattaaa aagacaacat tagattttgt 240
cgatttatag caattttata aatatataac tttgtcactt ggatcctgaa gcaaaataat 300
aaagtgaatt tgggattitt gtacttggta aaaagtttaa caccctaaat tcacaactag 360
tggatccccc gggctgcagg aattcgatat caagcttatc gataccgtcg acctcgaggg 420
ggggcccggt acccaattcg ccctatagtg agtcgta
                                                                   457
<210> 307
<211> 491
<212> DNA
<213> Homo sapiens
<400> 307
qtgcttqqac qqaacccqqc qctcqttccc caccccqqcc qqccqcccat agccaqccct 60
cogtoacoto ttoacogoac cotoggacty coccaaggee cocgeogoeg etecagegee 120
gegeageeae egeegeegee geegeetete ettagtegee geeatgaega eegegteeae 180
ctcgcaggtg cgccagaact accaccagga ctcagaggcc gccatcaacc gccagatcaa 240
cctggagete taegeeteet aegtttaeet gtecatgtet taetaetttg aeegegatga 300
tgtggctttg aagaactttg ccaaatactt tcttcaccaa tctcatgagg agagggaaca 360
tgctgagaaa ctgatgaagc tgcagaacca acgaggtggc cgaatcttcc ttcaggatat 420
caagaaacca gactgtgatg actgggagag cgggctgaat gcaatggagt gtgcattaca 480
tttggaaaaa a
                                                                   491
<210> 308
<211> 421
<212> DNA
<213> Homo sapiens
<400> 308
ctcagcgctt cttctttctt ggtttgatcc tgactgctgt catggcgtgc cctctggaga 60
aggecetgga tgtgatggtg tecacettee acaagtacte gggeaaagag ggtgacaagt 120
tcaagctcaa caagtcagaa ctaaaggagc tgctgacccg ggagctgccc agcttcttgg 180
ggaaaaggac agatgaagct gctttccaga agctgatgag caacttggac agcaacaggg 240
acaacgaggt ggacttccaa gagtactgtg tetteetgte etgeategee atgatgtgta 300
acgaattett tgaaggette eeagataage ageeeaggaa gaaatgaaaa eteetetgat 360
gtggttgggg ggtctgccag ctggggccct ccctgtcgcc agtgggcact tttttttttc 420
<210> 309
<211> 321
<212> DNA
<213> Homo sapiens
<400> 309
accaaatggc ggatgacgcc ggtgcagcgg gggggcccgg gggccctggt ggccctggga 60
tggggaaceg eggtggette egeggaggtt teggeagtgg cateegggge eggggtegeg 120
geegtggaeg gggeegggge egaggeegeg gagetegegg aggeaaggee gaggataagg 180
agtggatgcc cgtcaccaag ttgggccgct tggtcaagga catgaagatc aagtccctgg 240
aggagateta tetettetee etgeecatta aggaateaga gateattgat ttetteetgg 300
gggcctctct caaggatgag g
                                                                   321
<210> 310
<211> 381
<212> DNA
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```
<213> Homo sapiens
<400> 310
ttaaccaqcc atattgqctc aataaatagc ttcggtaagg agttaatttc cttctagaaa 60
tcagtgccta tttttcctgg aaactcaatt ttaaatagtc caattccatc tgaagccaag 120
ctgttgtcat tttcattcgg tgacattctc tcccatgaca cccagaaggg gcagaagaac 180
cacatttttc atttataqat qtttqcatcc tttqtattaa aattattttq aaggggttqc 240
ctcattqqat qqcttttttt tttttcctcc agggagaagg ggagaaatgt acttggaaat 300
taatgtatgt ttacatetet ttgcaaatte etgtacatag agatatattt tttaagtgtg 360
                                                                   381
aatgtaacaa catactgtga a
<210> 311
<211> 538
<212> DNA
<213> Homo sapiens
<400> 311
tttgaattta caccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa 60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc 120
accaagttct gatatctttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct 180
tgaaaatatc cttgttgtgt attaggtttt taaataccag ctaaaggatt acctcactga 240
qtcatcaqta ccctcctatt cagetcccca agatgatgtg tttttgctta ccctaagaga 300
ggttttcttc ttatttttag ataattcaag tgcttagata aattatgttt tctttaagtg 360
tttatggtaa actcttttaa agaaaattta atatgttata getgaatett tttggtaaet 420
ttaaatettt ateatagaet etgtaeatat gtteaaatta getgettgee tgatgtgtgt 480
atcatcggtg ggatgacaga acaaacatat ttatgatcat gaataatgtg ctttgtaa
<210> 312
<211> 176
<212> DNA
<213> Homo sapiens
<400> 312
qqaqqaqcaq ctgaqaqata qqqtcaqtga atgcqgttca gcctgctacc tctcctgtct 60
tcatagaacc attgccttag aattattgta tgacacgttt tttgttggtt aagctgtaag 120
qttttqttct ttgtgaacat gggtattttg aggggagggt ggagggagta gggaag
<210> 313
<211> 396
<212> DNA
<213> Homo sapiens
<400> 313
ccagcacccc caggccctgg gggacctggg ttctcagact gccaaagaag ccttgccatc 60
tggcgctccc atggctcttg caacatctcc ccttcgtttt tgagggggtc atgccggggg 120
agccaccage ceeteactgg gtteggagga gagteaggaa gggeeaagea egacaaagea 180
gaaacatcgg atttggggaa cgcgtgtcaa tcccttgtgc cgcagggctg ggcgggagag 240
actgttctgt tccttgtgta actgtgttgc tgaaagacta cctcgttctt gtcttgatgt 300
gtcaccgggg caactgcctg ggggcgggga tggggggagg gtggaagcgg ctccccattt 360
tataccaaaq qtqctacatc tatqtqatqq qtqqqq
<210> 314
<211> 311
<212> DNA
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```
<213> Homo sapiens
<400> 314
cctcaacatc ctcagagagg actggaagcc agtccttacg ataaactcca taatttatgg 60
cctgcagtat ctcttcttgg agcccaaccc cgaggaccca ctgaacaagg aggccgcaga 120
ggtcctgcag aacaaccggc ggctgtttga gcagaacgtg cagcgctcca tgcggggtgg 180
ctacategge tecacetact ttgagegetg cetgaaatag ggttggegea tacceacece 240
cgccacggcc acaagccctg gcatcccctg caaatattta ttgggggcca tgggtagggg 300
tttggggggc g
<210> 315
<211> 336
<212> DNA
<213> Homo sapiens
<400> 315
tttagaacat qqttatcatc caagactact ctaccctgca acattgaact cccaagagca 60
aatccacatt cctcttgagt tctgcagctt ctgtgtaaat agggcagctg tcgtctatgc 120
cqtaqaatca catqatctqa qqaccattca tqqaaqctqc taaataqcct aqtctgqgga 180
gtcttccata aagttttgca tggagcaaac aaacaggatt aaactaggtt tggttccttc 240
agecetetaa aageataggg ettageetge aggetteett gggetttete tgtgtgtgta 300
qttttgtaaa cactatagca tctgttaaga tccagt
<210> 316
<211> 436
<212> DNA
<213> Homo sapiens
<400> 316
aacatggtct gcgtgcctta agagagacgc ttcctgcaga acaggacctg actacaaaga 60
atgtttccat tggaattgtt ggtaaagact tggagtttac aatctatgat gatgatgatg 120
tgtctccatt cctgqaaqqt cttqaaqaaa gaccacagag aaaggcacag cctgctcaac 180
ctgctgatga acctgcagaa aaggctgatg aaccaatgga acattaagtg ataagccagt 240
ctatatatqt attatcaaat atqtaaqaat acaggcacca catactgatg acaataatct 300
atactttgaa ccaaaagttg cagagtggtg gaatgctatg ttttaggaat cagtccagat 360
gtgagttttt tecaagcaac eteaetgaaa eetatataat ggaataeatt tttetttgaa 420
                                                                   436
agggtctgta taatca
<210> 317
<211> 196
<212> DNA
<213> Homo sapiens
<400> 317
tattccttqt qaaqatqata tactattttt gttaagcgtg tctgtattta tgtgtgagga 60
getgetgget tgeagtgege gtgeaegtgg agagetggtg ceeggagatt ggaeggeetg 120
atgetecete ecetgeeetg gteeagggaa getggeegag ggteetgget eetgagggge 180
                                                                   196
atctgcccct ccccca
<210> 318
<211> 381
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc feature
<222> 8, 9, 102, 122, 167, 182, 193, 235, 253, 265, 266, 290, 321,
<223> n = A, T, C or G
<400> 318
gacgettnng cegtaacgat gateggagae atectgetgt tegggaegtt getgatgaat 60
gccggggcgg tgctgaactt taagctgaaa aagaaggaca cncagggctt tggggaggag 120
threagggage ceaacacagg tgacaacate egggaattet tgetganeet cagatacttt 180
cnaatettea tenecetgtg gaacatette atgatgttet geatgattgt getgntegge 240
tettgaatee canegatgaa accannaact caettteeeg ggatgeegan tetecattee 300
tccattcctg atgacttcaa naatgttttt gaccaaaaaa ccgacaacct tcccagaaag 360
                                                                   381
tccaaqctcg tggtgggngg a
<210> 319
<211> 506
<212> DNA
<213> Homo sapiens
<400> 319
ctaagcttta cgaatggggt gacaacttat gataaaaact agagctagtg aattagccta 60
tttqtaaata cctttgttat aattgatagg atacatcttg gacatggaat tgttaagcca 120
cctctqaqca qtqtatqtca qqacttqttc attaggttgg cagcagaggg gcagaaggaa 180
ttatacaggt agagatgtat gcagatgtgt ccatatatgt ccatatttac attttgatag 240
ccattgatgt atgcatctct tggctgtact ataagaacac attaattcaa tggaaataca 300
ctttgctaat attttaatgg tatagatctg ctaatgaatt ctcttaaaaa catactgtat 360
totgttgctg tgtgtttcat tttaaattga gcattaaggg aatgcagcat ttaaatcaga 420
actotyccaa tycttttatc tagagycyty ttyccatttt tytottatat gaaatttcty 480
                                                                   506
tcccaagaaa ggcaggatta catctt
<210> 320
<211> 351
<212> DNA
<213> Homo sapiens
<400> 320
ctgacctgca ggacgaaacc atgaagagcc tgatccttct tgccatcctg gccgccttag 60
cggtagtaac tttgtgttat gaatcacatg aaagcatgga atcttatgaa cttaatccct 120
tcattaacag gagaaatgca aataccttca tatcccctca gcagagatgg agagctaaag 180
tocaagagag gatoogagaa ogototaago otgtocacga gotoaatagg gaagootgtg 240
atgactacag actttgcgaa cgctacgcca tggtttatgg atacaatgct gcctataatc 300
qctacttcag gaagcgccga gggaccaaat gagactgagg gaagaaaaaa a
                                                                   351
<210> 321
<211> 421
<212> DNA
<213> Homo sapiens
<400> 321
ctcggaggcg ttcagctgct tcaagatgaa gctgaacatc tccttcccag ccactggctg 60
ccagaaactc attgaagtgg acgatgaacg caaacttcgt actttctatg agaagcgtat 120
ggccacagaa gttgctgctg acgctctggg tgaagaatgg aagggttatg tggtccgaat 180
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Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly
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Arg Glu Thr Tyr Glu Met Leu Leu Lys Ile Lys Glu Ser Leu Glu Leu
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                              380
Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln
        390
                                     395
Gln Gln Gln His Gln His Leu Leu Gln Lys His Leu Leu Ser Ala Cys
              405
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Phe Arg Asn Glu Leu Val Glu Pro Arg Arg Glu Thr Pro Lys Gln Ser
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Asp Val Phe Phe Arg His Ser Lys Pro Pro Asn Arg Ser Val Tyr Pro
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Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
                      55
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
                  70
                                     7.5
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
              85
                                 90
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
          100
                             105
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
      115
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115 120 125 Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr

Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn

130 135

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145
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Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
              165 170 175
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
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                   185
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
       195
            200
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
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                                         220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
                  230
                                     235
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
              245
                                250
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
          260
                             265
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Ser Arg Gln Asn Thr
                        280
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
    290 295
                            300
Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
     310
                       315
Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
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Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
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                             345
Leu Gln Lys Gln
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Pro Tyr Ile Gln Arg Phe Val Glu Thr Pro Ala His Phe Ser Trp Lys
           2.0
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Glu Ser Tyr Tyr Arg Ser Thr Met Ser Gln Ser Thr Gln Thr Asn Glu
                         40
Phe Leu Ser Pro Glu Val Phe Gln His Ile Trp Asp Phe Leu Glu Gln
                      55
Pro Ile Cys Ser Val Gln Pro Ile Asp Leu Asn Phe Val Asp Glu Pro
                  70
                                    75
Ser Glu Asp Gly Ala Thr Asn Lys Ile Glu Ile Ser Met Asp Cys Ile
                                90
Arg Met Gln Asp Ser Asp Leu Ser Asp Pro Met Trp Pro Gln Tyr Thr
          100
                            105
Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn Gly Ser
      115
                        120
Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser Val Thr
                     135
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Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala Leu Ser

1 / 5					150					1					1.00
145 Pro	Ser	Pro	Δla	Tlo	150 Pro	Sor	Δen	Thr	Aen	155	Dro	Clar	Dro	шіс	160
110	001	110	1114	165	110	001	71511	1111	170	тут	110	Эту	FIO	175	ser
Phe	Asp	Val	Ser 180	Phe	Gln	Gln	Ser	Ser 185	Thr	Ala	Lys	Ser	Ala 190		Trp
Thr	Tyr	Ser 195	Thr	Glu	Leu	Lys	Lys 200	Leu	Tyr	Cys	Gln	Ile 205	Ala	Lys	Thr
Cys	Pro 210	Ile	Gln	Ile	Lys	Val 215	Met	Thr	Pro	Pro	Pro 220	Gln	Gly	Ala	Val
Ile 225	Arg	Ala	Met	Pro	Val 230	Tyr	Lys	Lys	Ala	Glu 235	His	Val	Thr	Glu	Val 240
Val	Lys	Arg	Cys	Pro 245	Asn	His	Glu	Leu	Ser 250	Arg	Glu	Phe	Asn	Glu 255	Gly
Gln	Ile	Ala	Pro 260	Pro	Ser	His	Leu	Ile 265	Arg	Val	Glu	Gly	Asn 270	Ser	His
Ala	Gln	Tyr 275	Val	Glu	Asp	Pro	Ile 280	Thr	Gly	Arg	Gln	Ser 285	Val	Leu	Val
Pro	Tyr 290	Glu	Pro	Pro	Gln	Val 295		Thr	Glu	Phe	Thr 300		Val	Leu	Tyr
Asn 305	Phe	Met	Cys	Asn	Ser 310	Ser	Cys	Val	Gly	Gly 315	Met	Asn	Arg	Arg	Pro 320
Ile	Leu	Ile	Ile	Val 325	Thr	Leu	Glu	Thr	Arg 330	Asp	Gly	Gln	Val	Leu 335	Gly
Arg	Arg	Cys	Phe 340	Glu	Ala	Arg	Ile	Cys 345	Ala	Cys	Pro	Gly	Arg 350	Asp	Arg
Lys	Ala	Asp 355	Glu	Asp	Ser	Ile	Arg 360	Lys	Gln	Gln	Val	Ser 365	Asp	Ser	Thr
Lys	Asn 370	Gly	Asp	Gly	Thr	Lys 375	Arg	Pro	Phe	Arg	Gln 380	Asn	Thr	His	Gly
Ile 385	Gln	Met	Thr	Ser	Ile 390	Lys	Lys	Arg	Arg	Ser 395	Pro	Asp	Asp	Glu	Leu 400
Leu	Tyr	Leu	Pro	Val 405	Arg	Gly	Arg	Glu	Thr 410	Tyr	Glu	Met	Leu	Leu 415	Lys
Ile	Lys	Glu	Ser 420	Leu	Glu	Leu	Met	Gln 425	Tyr	Leu	Pro	Gln	His 430	Thr	Ile
Glu	Thr	Tyr 435	Arg	Gln	Gln	Gln	Gln 440	Gln	Gln	His	Gln	His 445	Leu	Leu	Gln
Lys	Gln 450	Thr	Ser	Ile	Gln	Ser 455	Pro	Ser	Ser	Tyr	Gly 460	Asn	Ser	Ser	Pro
465					Asn 470					475					480
Leu	Ile	Asn	Pro	Gln 485	Gln	Arg	Asn	Ala	Leu 490	Thr	Pro	Thr	Thr	Ile 495	Pro
Asp	Gly	Met	Gly 500	Ala	Asn	Ile	Pro	Met 505	Met	Gly	Thr	His	Met 510	Pro	Met
Ala	Gly	Asp 515	Met	Asn	Gly	Leu	Ser 520	Pro	Thr	Gln	Ala	Leu 525	Pro	Pro	Pro
Leu	Ser 530	Met	Pro	Ser	Thr	Ser 535	Gln	Cys	Thr	Pro	Pro 540	Pro	Pro	Tyr	Pro
Thr 545	Asp	Cys	Ser	Ile	Val 550	Ser	Phe	Leu	Ala	Arg 555	Leu	Gly	Cys	Ser	Ser 560
Cys	Leu	Asp	Tyr	Phe 565	Thr	Thr	Gln	Gly	Leu 570		Thr	Ile	Tyr	Gln 575	
Glu	His	Tyr	Ser	Met	Asp	Asp	Leu	Ala	Ser	Leu	Lys	Ile	Pro		Gln

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580
                            585
Phe Arg His Ala Ile Trp Lys Gly Ile Leu Asp His Arg Gln Leu His
      595 600 605
Glu Phe Ser Ser Pro Ser His Leu Leu Arg Thr Pro Ser Ser Ala Ser
                     615
                                        620
Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val Ile Asp
                 630
                                    635
Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro Arg Asp
              645
                                 650
Glu Trp Asn Asp Phe Asn Phe Asp Met Asp Ala Arg Arg Asn Lys Gln
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Gln Arg Ile Lys Glu Glu Gly Glu
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Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
                              25
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
                          4.0
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
                   55
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
                  70
                                     75
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
              85
                                 90
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
          100
                             105
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
                          120
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
                      135
                                         140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
                  150
                                     155
Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
              165
                                 170
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
                              185
                                                190
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
       195
                          200
                                             205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
                      215
                                         220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
                 230
                                    235
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
               245
                                  250
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Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp

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260
                          265
                                           270
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
             280 285
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
          295
                                    300
Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
305 310 315
Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
             325
                              330
Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
          340
                           345
Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser
                       360
Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val
                           380
                   375
Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr
                390
                       395
Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met
             405
                  410
Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro
 420 425 430
Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro
                       440
Tyr Pro Thr Asp Cys Ser Ile Val Arg Ile Trp Gln Val
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                              10
Gln His Ile Trp Asp Phe Leu Glu Gln Pro Ile Cys Ser Val Gln Pro
 20
                           25
Ile Asp Leu Asn Phe Val Asp Glu Pro Ser Glu Asp Gly Ala Thr Asn
                       40
Lys Ile Glu Ile Ser Met Asp Cys Ile Arg Met Gln Asp Ser Asp Leu
                    55
Ser Asp Pro Met Trp Pro Gln Tyr Thr Asn Leu Gly Leu Leu Asn Ser
                70
                                 75
Met Asp Gln Gln Ile Gln Asn Gly Ser Ser Ser Thr Ser Pro Tyr Asn
                              90
Thr Asp His Ala Gln Asn Ser Val Thr Ala Pro Ser Pro Tyr Ala Gln
                          105
                                           110
Pro Ser Ser Thr Phe Asp Ala Leu Ser Pro Ser Pro Ala Ile Pro Ser
                       120
                             125
Asn Thr Asp Tyr Pro Gly Pro His Ser Phe Asp Val Ser Phe Gln Gln
                        140
 130 135
Ser Ser Thr Ala Lys Ser Ala Thr Trp Thr Tyr Ser Thr Glu Leu Lys
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150 155 160

Lys Leu Tyr Cys Gln Ile Ala Lys Thr Cys Pro Ile Gln Ile Lys Val

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165
                               170
Met Thr Pro Pro Pro Gln Gly Ala Val Ile Arg Ala Met Pro Val Tyr
              185
         180
Lys Lys Ala Glu His Val Thr Glu Val Val Lys Arg Cys Pro Asn His
           200
Glu Leu Ser Arg Glu Phe Asn Glu Gly Gln Ile Ala Pro Pro Ser His
                     215
Leu Ile Arg Val Glu Gly Asn Ser His Ala Gln Tyr Val Glu Asp Pro
                 230
                                   235
Ile Thr Gly Arg Gln Ser Val Leu Val Pro Tyr Glu Pro Pro Gln Val
              245
                                250
Gly Thr Glu Phe Thr Thr Val Leu Tyr Asn Phe Met Cys Asn Ser Ser
                           265
Cys Val Gly Met Asn Arg Arg Pro Ile Leu Ile Ile Val Thr Leu
                        280
Glu Thr Arg Asp Gly Gln Val Leu Gly Arg Arg Cys Phe Glu Ala Arg
                     295
                                      300
Ile Cys Ala Cys Pro Gly Arg Asp Arg Lys Ala Asp Glu Asp Ser Ile
                310
                      315
Arg Lys Gln Gln Val Ser Asp Ser Thr Lys Asn Gly Asp Gly Thr Lys
             325 330
Arg Pro Phe Arg Gln Asn Thr His Gly Ile Gln Met Thr Ser Ile Lys
                            345
Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly
       355
                         360
Arg Glu Thr Tyr Glu Met Leu Leu Lys Ile Lys Glu Ser Leu Glu Leu
                     375
Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln
                 390
                                   395
Gln Gln His Gln His Leu Leu Gln Lys Gln Thr Ser Ile Gln Ser
             405
                            410
Pro Ser Ser Tyr Gly Asn Ser Ser Pro Pro Leu Asn Lys Met Asn Ser
                         425 430
Met Asn Lys Leu Pro Ser Val Ser Gln Leu Ile Asn Pro Gln Gln Arg
      435
                        440 445
Asn Ala Leu Thr Pro Thr Thr Ile Pro Asp Gly Met Gly Ala Asn Ile
                     455
                                       460
Pro Met Met Gly Thr His Met Pro Met Ala Gly Asp Met Asn Gly Leu
                 470
                                   475
Ser Pro Thr Gln Ala Leu Pro Pro Pro Leu Ser Met Pro Ser Thr Ser
              485
                                490
His Cys Thr Pro Pro Pro Pro Tyr Pro Thr Asp Cys Ser Ile Val Arg
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Ile Trp Gln Val
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<211> 1800

<212> DNA

<213> Homo sapiens

<400> 345

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tgacattcgt atcatcactg tgcaccattg gcttctaggc actccagtgg ggtaggagaa 180
ggaggtetga aaccetegea gagggatett geceteatte tttgggtetg aaacaetgge 240
agtcgttgga aacaggactc agggataaac cagcgcaatg gattggggga cgctgcacac 300
tttcatcggg ggtgtcaaca aacactccac cagcatcggg aaggtgtgga tcacagtcat 360
ctttattttc cgagtcatga tcctagtggt ggctgcccag gaagtgtggg gtgacgagca 420
agaggactic gtctgcaaca cactgcaacc gggatgcaaa aatgtgtgct atgaccactt 480
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gctgctggtg gccatgcatg tggcctacta caggcacgaa accactcgca agttcaggcg 600
aggagagaag aggaatgatt tcaaagacat agaggacatt aaaaagcaca aggttcggat 660
agaggggtcg ctgtggtgga cgtacaccag cagcatcttt ttccgaatca tctttgaage 720
agoctttatg tatgtgtttt actteettta caatgggtae caeetgeeet gggtgttgaa 780
atgtgggatt gacccctgcc ccaaccttgt tgactgcttt atttctaggc caacagagaa 840
gaccqtqttt accattttta tgatttctqc qtctqtqatt tqcatqctqc ttaacqtqqc 900
agagttgtgc tacctgctgc tgaaagtgtg ttttaggaga tcaaagagag cacagacgca 960
ttcagatagt ggtcaaaatg caatcacagg tttcccaagc taaacatttc aaggtaaaat 1080
gtagctgcgt cataaggaga cttctgtctt ctccagaagg caataccaac ctgaaagttc 1140
cttctgtagc ctgaagagtt tgtaaatgac tttcataata aatagacact tgagttaact 1200
ttttgtagga tacttgctcc attcatacac aacgtaatca aatatgtggt ccatctctga 1260
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gactototga caaagtgggt actttotgaa aatttatata actgttgttg ataaggaaca 1380
tttatccagg aattgatacg tttattagga aaagatattt ttataggett ggatgttttt 1440
agttccgact ttgaatttat ataaagtatt tttataatga ctggtcttcc ttacctggaa 1500
aaacatgcga tgttagtttt agaattacac cacaagtatc taaatttcca acttacaaag 1560
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tacgcttaag gtgggaaagt gttcattgca caatatattt ttactgcttt ctgaatgtag 1680
acqgaacaqt qtqqaaqcaq aaqqcttttt taactcatcc gtttqqccqa tcqttqcaqa 1740
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Ser Thr Ser Ile Gly Lys Val Trp Ile Thr Val Ile Phe Ile Phe Arg
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Val Met Ile Leu Val Val Ala Ala Gln Glu Val Trp Gly Asp Glu Gln
                           40
Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
                        55
Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
                    70
                                       7.5
Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
                85
                                   90
Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
            100
                               105
Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys Lys His Lys Val Arg Ile
                            120
                                               125
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Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Ile

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140
    130
                        135
Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
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                                        155
Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
                                    170
                165
Leu Val Asp Cys Phe Ile Ser Arg Pro Thr Glu Lys Thr Val Phe Thr
                                                    190
                                185
            180
Ile Phe Met Ile Ser Ala Ser Val Ile Cys Met Leu Leu Asn Val Ala
                            200
Glu Leu Cys Tyr Leu Leu Leu Lys Val Cys Phe Arg Arg Ser Lys Arg
                        215
                                            220
Ala Gln Thr Gln Lys Asn His Pro Asn His Ala Leu Lys Glu Ser Lys
                    230
                                        235
Gln Asn Glu Met Asn Glu Leu Ile Ser Asp Ser Gly Gln Asn Ala Ile
                245
                                    250
Thr Gly Phe Pro Ser
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ttegtggaet geeeggaega gagetgggee eteaaggeea tegaggeget tteaggtaaa 180
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cqqaaacttc agatacqaaa tatcccgcct catttacagt gggaggtgct ggatagttta 300
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qttqtaaatq taacctattc caqtaaqqac caaqctaqac aaqcactaqa caaactqaat 420
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cagcaaaacc cettgcagca geeecgaggt egeeggggge ttgggcagag gggeteetca 540
aggcaggggt ctccaggatc cgtatccaag cagaaaccat gtgatttgcc tctgcgcctg 600
ctggttccca cccaatttgt tggagccatc ataggaaaag aaggtgccac cattcggaac 660
atcaccaaac agacccaqtc taaaatcqat gtccaccqta aagaaaatgc gggggctgct 720
gagaagtega ttactateet etetaeteet gaaggeacet etgeggettg taagtetatt 780
ctggagatta tgcataagga agctcaagat ataaaattca cagaagagat ccccttgaag 840
attttagctc ataataactt tgttggacgt cttattggta aagaaggaag aaatcttaaa 900
aaaattgagc aagacacaga cactaaaatc acgatatctc cattgcagga attgacgctg 960
tataatccag aacgcactat tacagttaaa ggcaatgttg agacatgtgc caaagctgag 1020
gaggagatca tgaagaaaat cagggagtct tatgaaaatg atattgcttc tatgaatctt 1080
caagcacatt taatteetgg attaaatetg aacgeettgg gtetgtteee acceaettea 1140
gggatgecae eteccaecte agggececet teagecatga etecteceta ecegeagitt 1200
gagcaatcag aaacggagac tgttcatctg tttatcccag ctctatcagt cggtgccatc 1260
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gaggeteagt teaaggetea gggaagaatt tatggaaaaa ttaaagaaga aaaetttgtt 1440
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gttqttqtcc ctcqtqacca qacacctqat qaqaatqacc aagtqqttqt caaaataact 1620
ggtcacttct atgcttgcca ggttgcccag agaaaaattc aggaaattct gactcaggta 1680
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<212> PRT
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                             25
Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser
                                  45
                         40
Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His
                      55
Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile
                                    75
                 70
Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val
              85
                                90
Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln
 100 105
Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser
                          120
                                            125
Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu
                      135
                                        140
Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala
                                    155
                 150
Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln
                                170
Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys
                            185
          180
                                                190
Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly
      195 200
                               205
Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln
 210 215 220
Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala
                  230
                                    235
Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala
              245
                                 250
Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys
                             265
Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val
                         280
Gly Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln
                      295
                                        300
Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu
                                    315
                 310
Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys
              325
                                 330
Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu
                             345
Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu
                          360
       355
                                             365
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Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro
                        375
                                            380
Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe
                    390
                                        395
Glu Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu Ser
                405
                                    410
Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser
                                425
Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp
                                                 445
        435
                            440
Ala Lys Val Arq Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe
    450
                        455
                                            460
Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val
                    470
                                        475
Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser
                485
                                    490
Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu
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                                                     510
Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr
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                            520
                                                 525
Pro Asp Glu Asn Asp Gln Val Val Lys Ile Thr Gly His Phe Tyr
                        535
                                            540
Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val
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Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser
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Arg Arg Lys
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Asn Thr Gln Arg Lys Lys Ser Gln Glu Lys Met Arg Glu Val Thr Asp
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                                                 45
Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His
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egeqtqqteq qqaqcqctec qqcqqcaaqt eteqqcatet ccaccqqcqa eqtqatcace 300
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aacgtgacat tggccgaggg acccccggcc gaattcatgg attgggggac gctgcacact 480
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aaggaagetg agttggetge tgecaceget gagcaataac tagcataace cettggggee 960
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Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
                        55
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
                    70
                                        75
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
                                    90
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
                                105
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
        115
                            120
                                                125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Asp Trp Gly Thr Leu His
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                                            140
Thr Phe Ile Gly Gly Val Asn Lys His Ser Thr Ser Ile Gly Lys Val
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150
145
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Trp Ile Thr Val Ile Phe Ile Phe Arg Val Met Ile Leu Val Val Ala
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Ala Gln Glu Val Trp Gly Asp Glu Gln Glu Asp Phe Val Cys Asn Thr
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Leu Gln Pro Gly Cys Lys Asn Val Cys Tyr Asp His Phe Pro Val
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                            200
                                                205
Ser His Ile Arg Leu Trp Ala Leu Gln Leu Ile Phe Val Ser Thr Pro
                        215
Ala Leu Leu Val Ala Met His Val Ala Tyr Tyr Arg His Glu Thr Thr
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Arg Lys Phe Arg Arg Gly Glu Lys Arg Asn Asp Phe Lys Asp Ile Glu
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Asp Ile Lys Lys Gln Lys Val Arg Ile Glu Gly
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gegettaacg ggcatcatee eggtgacgte ateteggtga eetggeaaac caagteggge 360
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cqaatcatct ttgaaqcaqc ctttatgtat qtqttttact tcctttacaa tqqqtaccac 600
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totaggocaa cagagaagac cgtgtttacc atttttatga tttctgcgtc tgtgatttgc 720
atgctgctta acgtggcaga gttgtgctac ctgctgctga aagtgtgttt taggagatca 780
aagagaqcac agacgcaaaa aaatcacccc aatcatgccc taaaggagag taagcagaat 840
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            20
                                25
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Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
                            40
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
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60

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Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
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                 90
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
        100 105
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
      115 120
                          125
Leu Ala Glu Gly Pro Pro Ala Glu Phe His Glu Thr Thr Arg Lys Phe
                       140
                  135
Arg Arg Gly Glu Lys Arg Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys
                    155
      150
Lys Gln Lys Val Arg Ile Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser
            165
                   170 175
Ser Ile Phe Phe Arq Ile Ile Phe Glu Ala Ala Phe Met Tyr Val Phe
        180 185 190
Tyr Phe Leu Tyr Asn Gly Tyr His Leu Pro Trp Val Leu Lys Cys Gly
   195 200
                                      205
Ile Asp Pro Cys Pro Asn Leu Val Asp Cys Phe Ile Ser Arg Pro Thr
                  215 220
Glu Lys Thr Val Phe Thr Ile Phe Met Ile Ser Ala Ser Val Ile Cys
   230
                               235 240
Met Leu Leu Asn Val Ala Glu Leu Cys Tyr Leu Leu Lys Val Cys
            245
                            250
Phe Arg Arg Ser Lys Arg Ala Gln Thr Gln Lys Asn His Pro Asn His
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Ala Leu Lys Glu Ser Lys Gln Asn Glu Met Asn Glu Leu Ile Ser Asp
   275 280
Ser Gly Gln Asn Ala Ile Thr Gly Phe Pro Ser
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Asn Leu Ile Ser Asn Ile Lys Glu Met Ile Thr Glu Ala Ser Phe Tyr
Leu Phe Asn Ala Thr Lys Arg Arg Val Phe Phe Arg Asn Ile Lys Ile
                      55
Leu Ile Pro Ala Thr Trp Lys Ala Asn Asn Asn Ser Lys Ile Lys Gln
Glu Ser Tyr Glu Lys Ala Asn Val Ile Val Thr Asp Trp Tyr Gly Ala
                                 90
              8.5
His Gly Asp Asp Pro Tyr Thr Leu Gln Tyr Arg Gly Cys Gly Lys Glu
         100
                             105
                                                110
Gly Lys Tyr Ile His Phe Thr Pro Asn Phe Leu Leu Asn Asp Asn Leu
                         120
                               125
Thr Ala Gly Tyr Gly Ser Arg Gly Arg Val Phe Val His Glu Trp Ala
                      135
                                        140
His Leu Arg Trp Gly Val Phe Asp Glu Tyr Asn Asn Asp Lys Pro Phe
                  150
                                     155
Tyr Ile Asn Gly Gln Asn Gln Ile Lys Val Thr Arg Cys Ser Ser Asp
              165
                                 170
Ile Thr Gly Ile Phe Val Cys Glu Lys Gly Pro Cys Pro Gln Glu Asn
         180 185
Cys Ile Ile Ser Lys Leu Phe Lys Glu Gly Cys Thr Phe Ile Tyr Asn
      195
                      200
                                            205
Ser Thr Gln Asn Ala Thr Ala Ser Ile Met Phe Met Gln Ser Leu Ser
                     215
                                        220
Ser Val Val Glu Phe Cys Asn Ala Ser Thr His Asn Gln Glu Ala Pro
                 230
                      235
Asn Leu Gln Asn Gln Met Cys Ser Leu Arg Ser Ala Trp Asp Val Ile
                                250
Thr Asp Ser Ala Asp Phe His His Ser Phe Pro Met Asn Gly Thr Glu
                             265
Leu Pro Pro Pro Pro Thr Phe Ser Leu Val Glu Ala Gly Asp Lys Val
                         280
Val Cys Leu Val Leu Asp Val Ser Ser Lys Met Ala Glu Ala Asp Arg
                     295
                                        300
Leu Leu Gln Leu Gln Gln Ala Ala Glu Phe Tyr Leu Met Gln Ile Val
                  310
                                    315
Glu Ile His Thr Phe Val Gly Ile Ala Ser Phe Asp Ser Lys Gly Glu
              325
                                 330
Ile Arg Ala Gln Leu His Gln Ile Asn Ser Asn Asp Asp Lys Leu
          340
                             345
Leu Val Ser Tyr Leu Pro Thr Thr Val Ser Ala Lys Thr Asp Ile Ser
                         360
Ile Cys Ser Gly Leu Lys Lys Gly Phe Glu Val Val Glu Lys Leu Asn
                      375
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Gly Lys Ala Tyr Gly Ser Val Met Ile Leu Val T 385	400 er Ser Gly Ser Thr 415 co Asn Leu Glu Glu 430 al Pro Asp Ile Ser 445 le Ser Ser Gly Thr 60 er Thr Gly Glu Asn 480 nr Val Asp Asn Thr
His Ser Ile Ala Leu Gly Ser Ser Ala Ala P 420	415 co Asn Leu Glu Glu 430 al Pro Asp Ile Ser 445 le Ser Ser Gly Thr 60 er Thr Gly Glu Asn 480 nr Val Asp Asn Thr 495
Leu Ser Arg Leu Thr Gly Gly Leu Lys Phe Phe V	430 al Pro Asp Ile Ser 445 le Ser Ser Gly Thr 60 er Thr Gly Glu Asn 480 nr Val Asp Asn Thr 495
435 440	445 le Ser Ser Gly Thr 60 er Thr Gly Glu Asn 480 nr Val Asp Asn Thr 495
Asn Ser Asn Ser Met Ile Asp Ala Phe Ser Ara T	60 er Thr Gly Glu Asn 480 nr Val Asp Asn Thr 495
	480 nr Val Asp Asn Thr 495
Gly Asp Ile Phe Gln Gln His Ile Gln Leu Glu S 465 470 475	495
Val Lys Pro His His Gln Leu Lys Asn Thr Val T 485 490	
Val Gly Asn Asp Thr Met Phe Leu Val Thr Trp G 500 505	In Ala Ser Gly Pro 510
Pro Glu Ile Ile Leu Phe Asp Pro Asp Gly Arg L 515 520	ys Tyr Tyr Thr Asn 525
Asn Phe Ile Thr Asn Leu Thr Phe Arg Thr Ala S 530 535	er Leu Trp Ile Pro 40
Gly Thr Ala Lys Pro Gly His Trp Thr Tyr Thr L 545 550 555	eu Asn Asn Thr His 560
His Ser Leu Gln Ala Leu Lys Val Thr Val Thr S 565 570	er Arg Ala Ser Asn 575
Ser Ala Val Pro Pro Ala Thr Val Glu Ala Phe V 580 585	al Glu Arg Asp Ser 590
Leu His Phe Pro His Pro Val Met Ile Tyr Ala A 595 600	sn Val Lys Gln Gly 605
Phe Tyr Pro Ile Leu Asn Ala Thr Val Thr Ala T 610 615 6	nr Val Glu Pro Glu 20
Thr Gly Asp Pro Val Thr Leu Arg Leu Leu Asp A 625 630 635	640
Asp Val Ile Lys Asn Asp Gly Ile Tyr Ser Arg T 645 650	yr Phe Phe Ser Phe 655
Ala Ala Asn Gly Arg Tyr Ser Leu Lys Val His V 660 665	670
Ser Ile Ser Thr Pro Ala His Ser Ile Pro Gly S 675 680	685
Val Pro Gly Tyr Thr Ala Asn Gly Asn Ile Gln M 690 695 7	et Asn Ala Pro Arg 30
Lys Ser Val Gly Arg Asn Glu Glu Glu Arg Lys T 705 710 715	720
Val Ser Ser Gly Gly Ser Phe Ser Val Leu Gly V 725 730	735
His Pro Asp Val Phe Pro Pro Cys Lys Ile Ile A 740 745	750
Lys Val Glu Glu Leu Thr Leu Ser Trp Thr A 755 760	765
	80
Leu Gln Asn Ile Gln Asp Asp Phe Asn Asn Ala I 785 790 795	800
Ser Lys Arg Asn Pro Gln Gln Ala Gly Ile Arg G 805 810	lu Ile Phe Thr Phe 815

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Ser Pro Gln Ile Ser Thr Asn Gly Pro Glu His Gln Pro Asn Gly Glu
                                825
Thr His Glu Ser His Arg Ile Tyr Val Ala Ile Arg Ala Met Asp Arg
                            840
                                                845
Asn Ser Leu Gln Ser Ala Val Ser Asn Ile Ala Gln Ala Pro Leu Phe
                        855
                                            860
Ile Pro Pro Asn Ser Asp Pro Val Pro Ala Arg Asp Tyr Leu Ile Leu
                    870
                                        875
Lys Gly Val Leu Thr Ala Met Gly Leu Ile Gly Ile Ile Cys Leu Ile
                                    890
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Ile Val Val Thr His His Thr Leu Ser Arg Lys Lys Arg Ala Asp Lys
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gaaatgataa ctgaagcttc attttaccta tttaatgcta ccaagagaag agtatttttc 180
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caaqaatcat atqaaaaqqc aaatqtcata qtqactqact qqtatqgggc acatggagat 300
gatccataca ccctacaata cagagggtgt ggaaaagagg gaaaatacat tcatttcaca 360
cctaatttcc tactgaatga taacttaaca gctggctacg gatcacgagg ccgagtgttt 420
gtccatgaat gggcccacct ccgttggggt gtgttcgatg agtataacaa tgacaaacct 480
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atgcaaagtt tatcttctgt ggttgaattt tgtaatgcaa gtacccacaa ccaagaagca 720
ccaaacctac agaaccagat gtgcagcctc agaagtgcat gggatgtaat cacagactct 780
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tcgcttgtag aggctggtga caaagtggtc tgtttagtgc tggatgtgtc cagcaagatg 900
geagaggetg acagacteet teaactacaa caageegeag aattttattt gatgeagatt 960
gttgaaattc atacettegt gggeattgee agtttegaca geaaaggaga gateagagee 1020
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atgatttatg ccaatgtgaa acagggattt tatcccattc ttaatgccac tgtcactgcc 1860
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acagttgage cagagactgg agatectgtt acgetgagae teettgatga tggageaggt 1920

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     agaatgagta aaagtctaca gaatatccaa gatgacttta acaatgctat tttagtaaat 2400
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     tatgttgcaa tacgagcaat ggataggaac tccttacagt ctgctgtatc taacattgcc 2580
     caggegeete tgtttattee eeceaattet gateetgtae etgecagaga ttatettata 2640
     ttgaaaggag ttttaacagc aatgggtttg ataggaatca tttgccttat tatagttgtg 2700
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     <213> Homo sapiens
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                                      25
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     Lys Met Arg Glu Val Thr Asp Ser Pro Gly Arg Pro Arg Glu Leu Thr
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Ile Pro Gln Thr Ser Ser His Gly Ala Asn Arg Phe Val

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65

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     aatacacaga ggaagaagag tcaggaaaag atgagagaag ttacagactc tcctgggcga 180
     eccegagage ttaccattee teagacttet teacatggtg etaacagatt tgtttgatga 240
     attc
     <210> 363
     <211> 20
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1 4 1
     <213> Homo sapiens
State Turk Tool Tark
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                                           10
     Ser Ser Gln Ile
20
١., إ
Part.
1
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i s
     <211> 60
ij,
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14,
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i să
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     <211> 20
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tgtgtaaaag tctgtgctta cgtaagaaaa caagtggaga agattaaaaa ttccatggat 1980
gggaagaatg tggatacagt tttgatggaa cttggagtac gttttcatcg acttatctat 2040
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gagcatette aacaatatte etacagttgt atgggtggca tgttggccat ttgtgatgta 2100 gccgaatata ggaagtgtgc caaagacttc aagattccaa tggtattaca tctttttgat 2160 actetgeatg etetttgeaa tettetggta gttgeeceag ataatttaaa geaagtetge 2220 tcaggagaac aacttgctaa tctggacaag aatatacttc actccttcgt acaacttcgt 2280 gctgattata gatctgcccg ccttgctcga cacttcagct gagattgaat ttacaaagga 2340 att <210> 369 <211> 708 <212> PRT <213> Homo sapiens <400> 369 Met Ala Thr Thr Ala Glu Leu Phe Glu Glu Pro Phe Val Ala Asp Glu 10 Tyr Ile Glu Arg Leu Val Trp Arg Thr Pro Gly Gly Ser Arg Gly 20 25 Gly Pro Glu Ala Phe Asp Pro Lys Arg Leu Leu Glu Glu Phe Val Asn 3.5 40 4.5 His Ile Gln Glu Leu Gln Ile Met Asp Glu Arg Ile Gln Arg Lys Val 55 60 Glu Lys Leu Glu Gln Gln Cys Gln Lys Glu Ala Lys Glu Phe Ala Lys 70 75 Lys Val Gln Glu Leu Gln Lys Ser Asn Gln Val Ala Phe Gln His Phe 85 90 Gln Glu Leu Asp Glu His Ile Ser Tyr Val Ala Thr Lys Val Cys His 100 105 110 Leu Gly Asp Gln Leu Glu Gly Val Asn Thr Pro Arg Gln Arg Ala Val 120 125 Glu Ala Gln Lys Leu Met Lys Tyr Phe Asn Glu Phe Leu Asp Gly Glu 135 140 Leu Lys Ser Asp Val Phe Thr Asn Ser Glu Lys Ile Lys Glu Ala Ala 150 155 Asp Ile Ile Gln Lys Leu His Leu Ile Ala Gln Glu Leu Pro Phe Asp 165 170 175 Arg Phe Ser Glu Val Lys Ser Lys Ile Ala Ser Lys Tyr His Asp Leu 185 Glu Cys Gln Leu Ile Gln Glu Phe Thr Ser Ala Gln Arg Arg Gly Glu 200 205 Ile Ser Arg Met Arg Glu Val Ala Ala Val Leu Leu His Phe Lys Gly 210 215 220 Tyr Ser His Cys Val Asp Val Tyr Ile Lys Gln Cys Gln Glu Gly Ala 230 235 Tyr Leu Arg Asn Asp Ile Phe Glu Asp Ala Gly Ile Leu Cys Gln Arg 245 250 Val Asn Lys Gln Val Gly Asp Ile Phe Ser Asn Pro Glu Thr Val Leu 260 265 270 Ala Lys Leu Ile Gln Asn Val Phe Glu Ile Lys Leu Gln Ser Phe Val 275 280 285 Lys Glu Gln Leu Glu Glu Cys Arg Lys Ser Asp Ala Glu Gln Tyr Leu 295 300 Lys Asn Leu Tyr Asp Leu Tyr Thr Arg Thr Thr Asn Leu Ser Ser Lys 310 315

Leu Met Glu Phe Asn Leu Gly Thr Asp Lys Gln Thr Phe Leu Ser Lys

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330
                                           335
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Leu Ile Lys Ser Ile Phe Ile Ser Tyr Leu Glu Asn Tyr Ile Glu Val
      340 345
Glu Thr Gly Tyr Leu Lys Ser Arg Ser Ala Met Ile Leu Gln Arg Tyr
 355
         360
                                     365
Tyr Asp Ser Lys Asn His Gln Lys Arg Ser Ile Gly Thr Gly Gly Ile
  370 375
                                  380
Gln Asp Leu Lys Glu Arg Ile Arg Gln Arg Thr Asn Leu Pro Leu Gly
               390
                               395
Pro Ser Ile Asp Thr His Gly Glu Thr Phe Leu Ser Gln Glu Val Val
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                            410
Val Asn Leu Leu Gln Glu Thr Lys Gln Ala Phe Glu Arg Cys His Arg
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                                        430
Leu Ser Asp Pro Ser Asp Leu Pro Arg Asn Ala Phe Arg Ile Phe Thr
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                            445
Ile Leu Val Glu Phe Leu Cys Ile Glu His Ile Asp Tyr Ala Leu Glu
                         460
  450 455
Thr Gly Leu Ala Gly Ile Pro Ser Ser Asp Ser Arg Asn Ala Asn Leu
    470
                   475 480
Tyr Phe Leu Asp Val Val Gln Gln Ala Asn Thr Ile Phe His Leu Phe
           485 490 495
Asp Lys Gln Phe Asn Asp His Leu Met Pro Leu Ile Ser Ser Pro
                        505
Lys Leu Ser Glu Cys Leu Gln Lys Lys Glu Ile Ile Glu Gln Met
     515
                      520
                                      525
Glu Met Lys Leu Asp Thr Gly Ile Asp Arg Thr Leu Asn Cys Met Ile
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Gly Gln Met Lys His Ile Leu Ala Ala Glu Gln Lys Lys Thr Asp Phe
    550
                               555
Lys Pro Glu Asp Glu Asn Asn Val Leu Ile Gln Tyr Thr Asn Ala Cys
                           570
            565
Val Lys Val Cys Ala Tyr Val Arg Lys Gln Val Glu Lys Ile Lys Asn
 580
                        585
Ser Met Asp Gly Lys Asn Val Asp Thr Val Leu Met Glu Leu Gly Val
     595 600
                                      605
Arg Phe His Arg Leu Ile Tyr Glu His Leu Gln Gln Tyr Ser Tyr Ser
                  615
                                  620
Cys Met Gly Gly Met Leu Ala Ile Cys Asp Val Ala Glu Tyr Arg Lys
               630
                               635
Cys Ala Lys Asp Phe Lys Ile Pro Met Val Leu His Leu Phe Asp Thr
            645
                            650
Leu His Ala Leu Cys Asn Leu Leu Val Val Ala Pro Asp Asn Leu Lys
                        665 670
Gln Val Cys Ser Gly Glu Gln Leu Ala Asn Leu Asp Lys Asn Ile Leu
                     680 685
His Ser Phe Val Gln Leu Arg Ala Asp Tyr Arg Ser Ala Arg Leu Ala
                                  700
  690
                  695
Arg His Phe Ser
705
```

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155
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Smith
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     Val Asn His Ser Pro Ser Ile Ser Thr Pro Ala His Ser Ile Pro Gly
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     Ser His Ala Met
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The first test in
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١٠١
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Mir.
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112
     <400> 378
124
     Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu Leu Asp Asp Gly Ala
      1
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111
     Gly Ala Asp Val
Parity
There
Man Tank
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Ar from Took Took it is
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     Lys Pro Gly His Trp Thr Tyr Thr Leu Asn Asn Thr His His Ser Leu
     1
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Gln Ala Leu Lys
e...
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i i j
177
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The first it is
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١..
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١...
     Phe Phe Lys Trp Leu Leu Ser Cys Cys Pro Gly Ser Ser Gln Ile Ala
1.1
     1
                                           10
Hard Hard
     Ala Ala Ala Ser
3
; =g
The state of
     <210> 388
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14
     <400> 388
     Leu Ser Cys Cys Pro Gly Ser Ser Gln Ile Ala Ala Ser Thr Gln
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     Pro Glu Asp
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Lys Met Arg Glu
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Thr Asp Ser Pro
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Arg Pro Arg Glu
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Val Thr Asp Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr
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15
1
                                  10
Ser Ser His Gly
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Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His Gly Ala
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Asn Arg Phe
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Lys Ile Pro Val
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Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro Phe Leu Val
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Lys Thr Gly Tyr
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1,13

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Tank took a n Tank took a n

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<212> PRT
<213> Homo sapiens
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Val Glu His Ser Val Pro Lys Arg Gln Arg Ile Arg Lys Leu Gln Ile
```

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10
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      1
     Arg Asn Ile Pro
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Leu Asp Lys Leu
:
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126
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     Asn Phe Thr Leu
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                    Gln Arg Gly Ser
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                                                                     20
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Mark is a
may bank
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The second
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                     Lys Gln Lys Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln
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t di
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i j
     Gln Ser Lys Ile
                20
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120
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     Asn Ala Gly Ala
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Brit. Just. Seeth B. B. Brit. Brit. B. Brit. Bri
               Pro Glu Gly Thr Ser Ala Ala Cys Lys Ser Ile Leu Glu Ile Met His
                                                                                                                           10
               Lys Glu Ala Gln
                                                   20
1,50
1 . . j
               <210> 419
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پيريا
                <211> 20
The state of
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111
                <400> 419
i ga
               Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys Phe Thr Glu
Har Tank and
                Glu Ile Pro Leu
                                                    20
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                ttgccctggg agttctcaaa ttgctgcagc agcctccacc cagcctgagg atgacatcaa 240
                tacacagagg aagaagatc aggaaaagat gagagaagtt acagactctc ctgggcgacc 300
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                                25
Gly Asp Tyr Tyr Thr Leu Ala Val Pro Met Gly Asp Val Pro Met Asp
                            40
Gly Ile Ser Val Ala Asp Ile Gly Ala Ala Val Ser Ser Ile Phe Asn
                        55
Ser Pro Glu Glu Phe Leu Gly Lys Ala Val Gly Leu Ser Ala Glu Ala
                    70
                                        75
Leu Thr Ile Gln Gln Tyr Ala Asp Val Leu Ser Lys Ala Leu Gly Lys
               8.5
                                    90
Glu Val Arg Asp Ala Lys Ile Thr Pro Glu Ala Phe Glu Lys Leu Gly
            100
                                105
Phe Pro Ala Ala Lys Glu Ile Ala Asn Met Cys Arg Phe Tyr Glu Met
                            120
Lys Pro Asp Arg Asp Val Asn Leu Thr His Gln Leu Asn Pro Lys Val
                        135
                                            140
Lys Ser Phe Ser Gln Phe Ile Ser Glu Asn Gln Gly Ala Phe Lys Gly
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                    150
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                                     10
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            20
                                25
Lys Ile Pro Val Ser Gly Pro Phe Leu Val Lys Thr Gly Tyr Ala Phe
                            40
Val Asp Cys Pro Asp Glu Ser Trp Ala Leu Lys Ala Ile Glu Ala Leu
                        55
Ser Gly Lys Ile Glu Leu His Gly Lys Pro Ile Glu Val Glu His Ser
                    70
                                         75
Val Pro Lys Arg Gln Arg Ile Arg Lys Leu Gln Ile Arg Asn Ile Pro
                                     90
Pro His Leu Gln Trp Glu Val Leu Asp Ser Leu Leu Val Gln Tyr Gly
                                105
                                                     110
Val Val Glu Ser Cys Glu Gln Val Asn Thr Asp Ser Glu Thr Ala Val
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Lys 145	Leu	Asn	Gly	Phe	Gln 150	Leu	Glu	Asn	Phe	Thr 155	Leu	Lys	Val	Ala	Tyr 160
Ile	Pro	Asp	Glu	Thr 165	Ala	Ala	Gln	Gln	Asn 170	Pro	Leu	Gln	Gln	Pro 175	Arg
Gly	Arg	Arg	Gly 180	Leu	Gly	Gln	Arg	Gly 185	Ser	Ser	Arg	Gln	Gly 190	Ser	Pro
Gly	Ser	Val 195	Ser	Lys	Gln	Lys	Pro 200	Cys	Asp	Leu	Pro	Leu 205	Arg	Leu	Leu
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Ala Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
Tyr Asp His Tyr Phe Pro Ile Ser His Ile Arg Leu Trp Ala Leu Gln
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Leu Ile Phe Val Ser Ser Pro Ala Leu Leu Val Ala Met His Val Ala
Tyr Arg Arg His Glu Lys Lys Arg Lys Phe Ile Lys Gly Glu Ile Lys
                                105
Ser Glu Phe Lys Asp Ile Glu Glu Ile Lys Thr Gln Lys Val Arg Ile
        115
Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Val
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                        135
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<223> PCR primer

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Pro Val
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Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala

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Gly	Arg 290	Leu	Ile	Gly	Lys	Glu 295	Gly	Arg	Asn	Leu	Lys 300	Lys	Ile	Glu	Gln
Asp 305	Thr	Asp	Thr	Lys	Ile 310	Thr	Ile	Ser	Pro	Leu 315	Gln	Glu	Leu	Thr	Leu 320
Tyr	Asn	Pro	Glu	Arg 325	Thr	Ile	Thr	Val	Lys 330	Gly	Asn	Val	Glu	Thr 335	Cys
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Asn	Leu 370	Asn	Ala	Leu	Gly	Leu 375	Phe	Pro	Pro	Thr	Ser 380	Gly	Met	Pro	Pro
Pro 385	Thr	Ser	Gly	Pro	Pro 390	Ser	Ala	Met	Thr	Pro 395	Pro	Tyr	Pro	Gln	Phe 400
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Ser	Pro	Lys	Glu	Glu 485	Val	Lys	Leu	Glu	Ala 490	His	Ile	Arg	Val	Pro 495	Ser
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Leu	Gln	Asn 515	Leu	Ser	Ser	Ala	Glu 520	Val	Val	Val	Pro	Arg 525	Asp	Gln	Thr
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<213> Artificial Sequence

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Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln

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Glu	Lys	Ser	Ile	Thr 245	Ile	Leu	Ser	Thr	Pro 250	Glu	Gly	Thr	Ser	Ala 255	Ala
Cys	Lys	Ser	Ile 260	Leu	Glu	Ile	Met	His 265	Lys	Glu	Ala	Gln	Asp 270	Ile	Lys
Phe	Thr	Glu 275	Glu	Ile	Pro	Leu	Lys 280	Ile	Leu	Ala	His	Asn 285	Asn	Phe	Val
Gly	Arg 290	Leu	Ile	Gly	Lys	Glu 295	Gly	Arg	Asn	Leu	Lys 300	Lys	Ile	Glu	Gln
Asp 305	Thr	Asp	Thr	Lys	Ile 310	Thr	Ile	Ser	Pro	Leu 315	Gln	Glu	Leu	Thr	Leu 320
Tyr	Asn	Pro	Glu	Arg 325	Thr	Ile	Thr	Val	Lys 330	Gly	Asn	Val	Glu	Thr 335	Cys
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Pro 385	Thr	Ser	Gly	Pro	Pro 390	Ser	Ala	Met	Thr	Pro 395	Pro	Tyr	Pro	Gln	Phe 400
Glu	Gln	Ser	Glu	Thr 405	Glu	Thr	Val	His	Leu 410	Phe	Ile	Pro	Ala	Leu 415	Ser
Val	Gly	Ala	Ile 420	Ile	Gly	Lys	Gln	Gly 425	Gln	His	Ile	Lys	Gln 430	Leu	Ser
Arg	Phe	Ala 435	Gly	Ala	Ser	Ile	Lys 440	Ile	Ala	Pro	Ala	Glu 445	Ala	Pro	Asp
Ala	Lys 450	Val	Arg	Met	Val	Ile 455	Ile	Thr	Gly	Pro	Pro 460	Glu	Ala	Gln	Phe
Lys 465		Gln	Gly	Arg	Ile 470		Gly	Lys	Ile	Lys 475		Glu	Asn	Phe	Val 480
Ser	Pro	Lys	Glu	Glu 485	Val	Lys	Leu	Glu	Ala 490	His	Ile	Arg	Val	Pro 495	Ser
Phe	Ala	Ala	Gly 500	Arg	Val	Ile	Gly	Lys 505	Gly	Gly	Lys	Thr	Val 510	Asn	Glu

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Gln Arg Gly Ser
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     Ile Leu Ser Thr
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Harry State
     <210> 461
il.
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     <213> Homo sapiens
1, 3
1,3
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Leu Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr
                                           10
Ē
and
Sunt
     Cys Ala Lys Ala
ij
                  20
17
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ž "Ł
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     Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu Asn Asp Ile
                                            10
     Ala Ser Met Asn
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     Thr Ser Gly Pro
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                                           10
     Ile Thr Gly Pro
                20
     <210> 465
     <211> 18
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from the there are
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Pin Bin
     Glu
<210> 466
122
     <211> 11
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ij
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     Phe Val Asp Cys Pro Asp Glu Ser Trp Ala Leu
į.
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     <400> 467
                                                                           33
     ttcgtggact gcccggacga gagctgggcc ctc
```
